

## nicam television set 4/3 format

Chassis code ICC17  
 28 inches  
 BLACK PEARL screen  
 FST tube  
 Mask METAL  
 BLACK MATRIX processing  
 Navilight  
 Stereo sound  
 NICAM 2 x 20 W  
 Built-in teletext  
 Standard : PAL / SECAM  
 NTSC via SCART connector  
 Norms : PanEuro-LL'BGIDKK'



image

sound

special features

connectors /  
general remarks



### image

FST 28 inches tube - 4/3 format  
 BLACK PEARL screen  
 Mask METAL  
 BLACK MATRIX processing for optimal contrast  
 S-VHS  
 Zoom function : adapts 4/3 transmissions to 16/9 format  
 Total tube size : 28 inches diagonal  
 Picture size : 26 inches diagonal  
 Standard : PAL / SECAM / NTSC via Vidéo connector  
 Norms : Pan-Euro LL'BGIDKK'  
 Videotext / Fasttext / Toptext : 6 pages

### sound

Stereo sound NICAM LBGDKK'  
 Power : 2 x 20W music  
 2 speakers medium  
 Spatial / Pseudo effects  
 Multi-lingual menu (14 languages)

### special features

Automatically switches to standby mode  
 when no signal is present after 5 minutes  
 Child lock  
 Display of channel number  
 Hotel mode  
 Navilight system  
 Memorize up to 99 channels + 3 AV channel  
 AUTO PROGRAMMING  
 Frequency synthesis tuner  
 Compatible with cable networks  
 8 MHz hyperband  
 RCT100 remote control

### connectors / general remarks

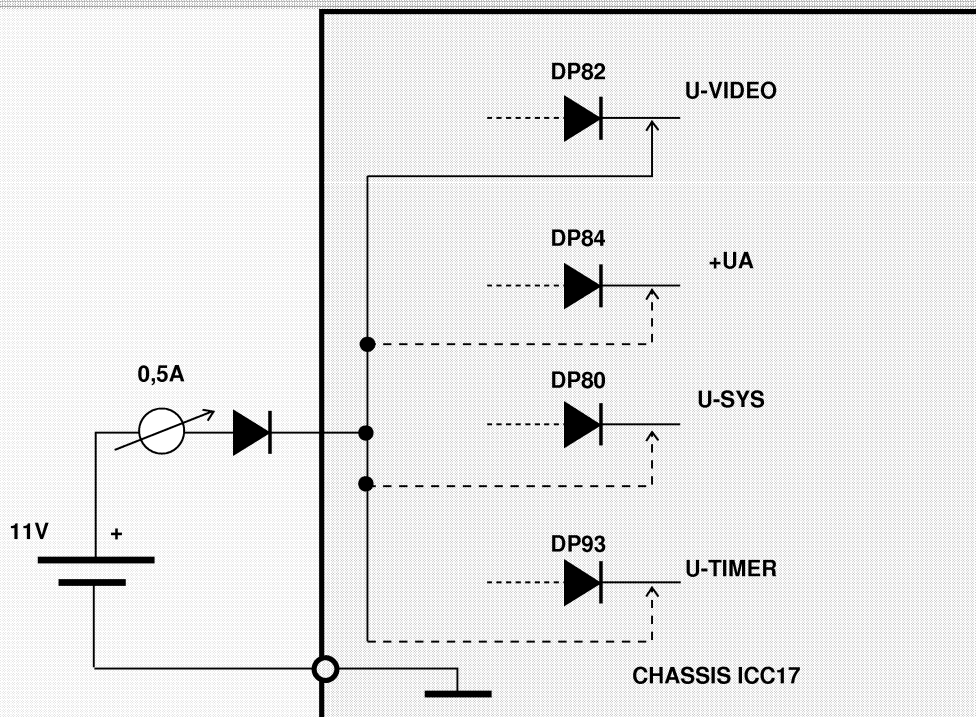
1 antenna connector  
 Front or Side : Headphone jack (6,35 mm)  
 2 AUDIO in / 1 CVBS in / S-VIDEO in  
 cinches  
 Rear : 2 SCARTS connector S-VHS compatible  
 Power supply : 220 - 240 V; 50/60 Hz  
 Consumption : 95 W/h - in stand-by mode < 1 W/h  
 Weight : 31 kg  
 Dimensions (W x H x D) : 700 x 542 x 462 mm  
 Optional stand : STTH2510

## SECONDARY DC-VOLTAGES

*All measurements in this chapter must be done WITHOUT the mains supply connected to the TV.*

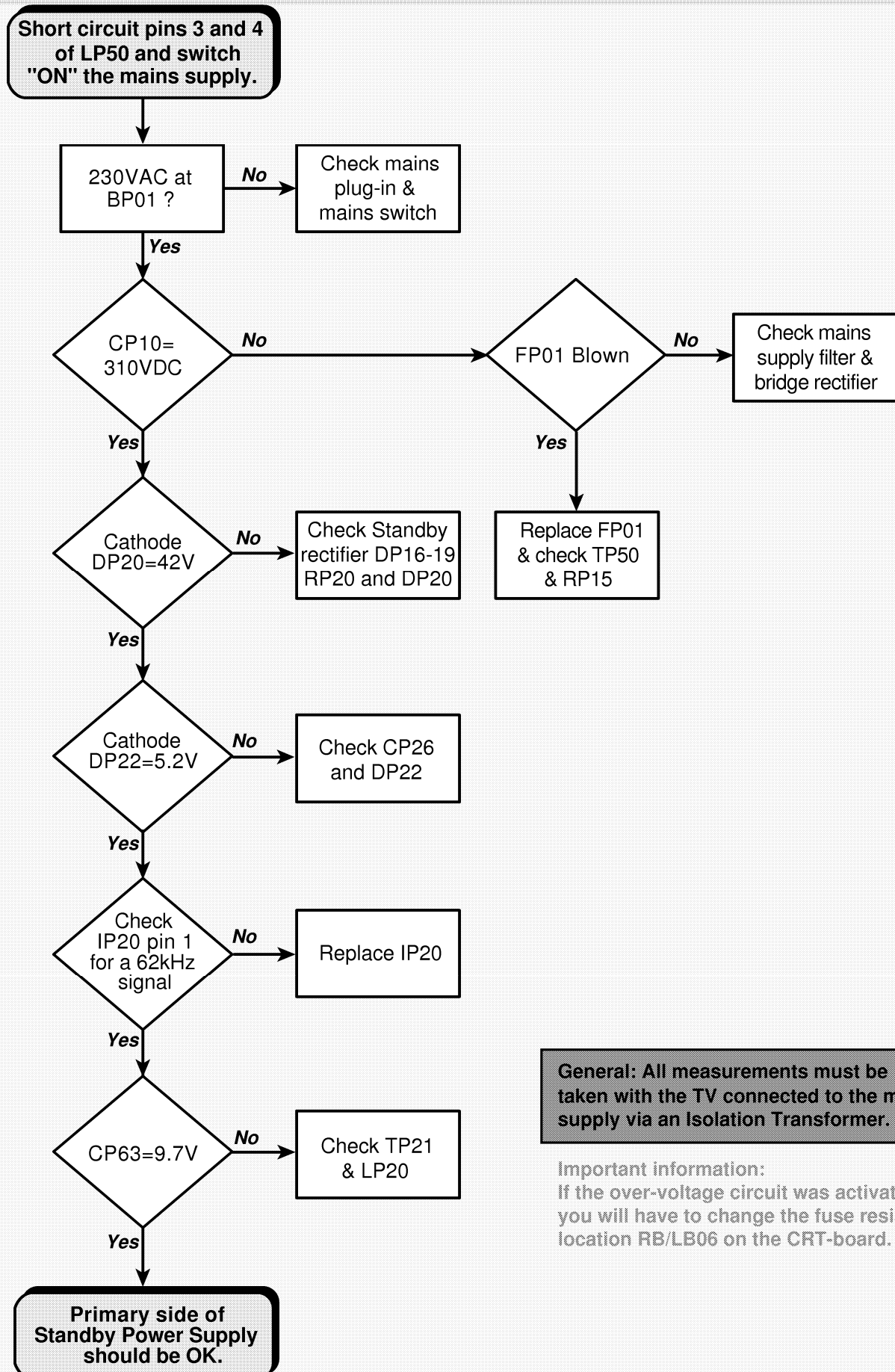
*Test circuit:*

*The external voltage source is provided by a variable DC-power supply with its output voltage set to 11V and the current limitation set to 500mA's. The negative terminal of the DC-power supply must be directly connected to the chassis secondary ground plane. The positive terminal of the DC-power supply is first connected to an ammeter and then the anode of an isolation diode. The cathode of the isolation diode is then connected to the load on the chassis as shown below. Measure the current drawn by each load tested.*

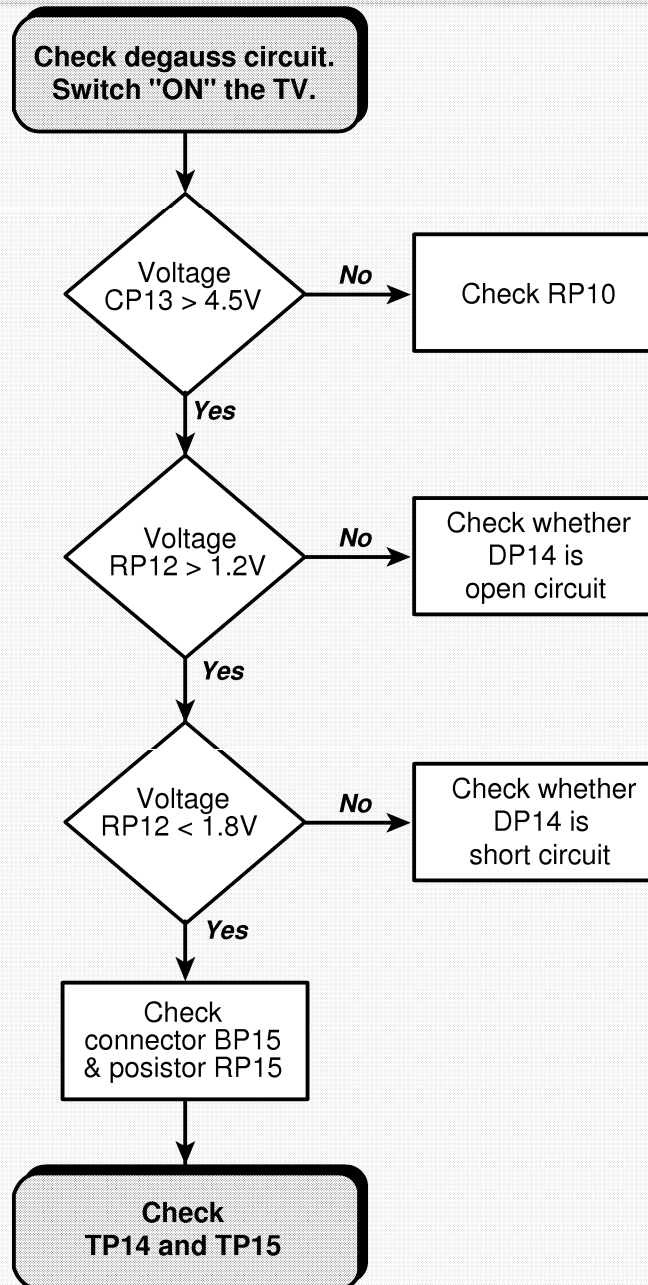




## STANDBY POWER SUPPLY - PRIMARY SIDE



## DEGAUSSING CIRCUIT



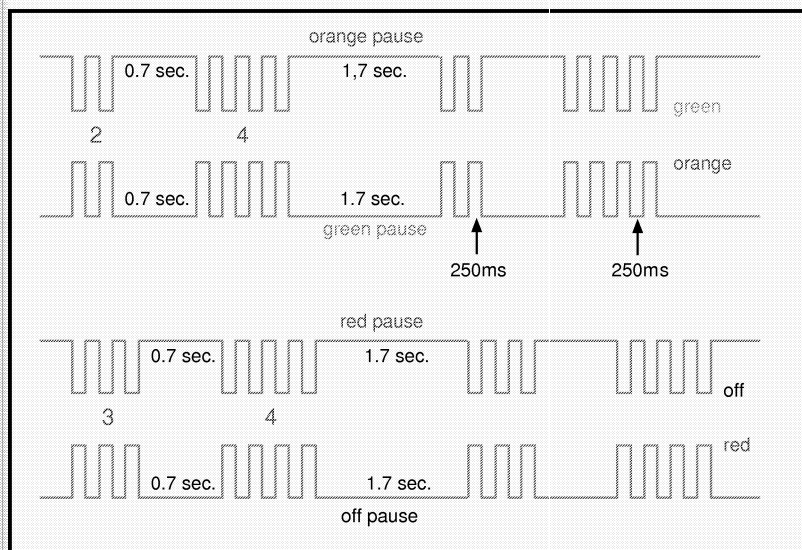
## GENERAL INFORMATION - LED BEHAVIOUR

### LED FLASHES

Error message transmission.

The error codes are signalled by the TV's red LED .

Count the number of flashes : the error code is two burst separated by a pause of 0.7 sec. and repeated four times. There is 1.7 sec between each codes sequence.

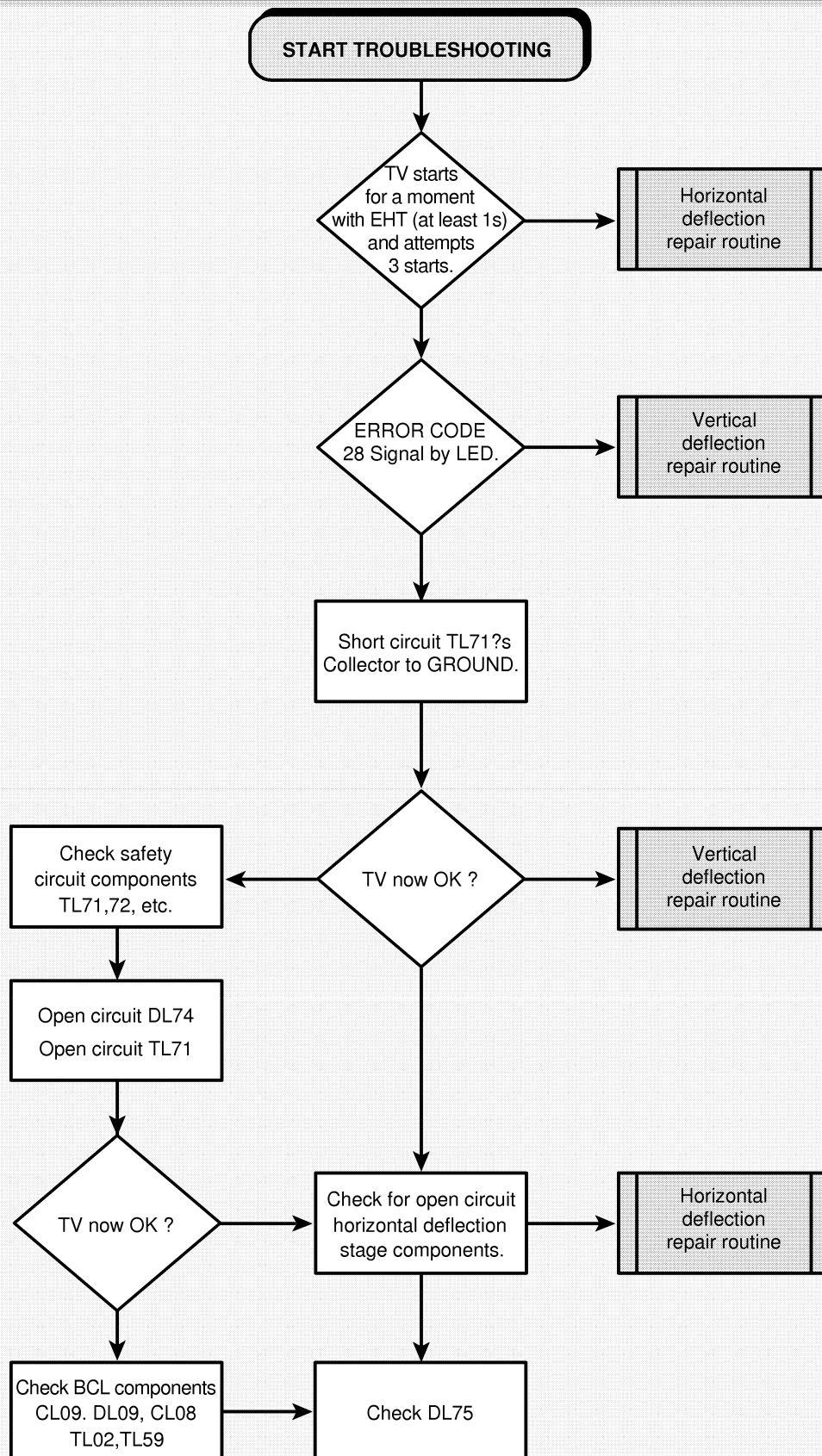


Currently all ICC17 TV sets are fitted with a Bicoloured LED, the red part is the Standby LED whilst, the green part is directly connected to the switched +8V supply. Therefore, the colour of the LED will depend upon the state of this voltage, the chart below gives the corresponding LED-colours:

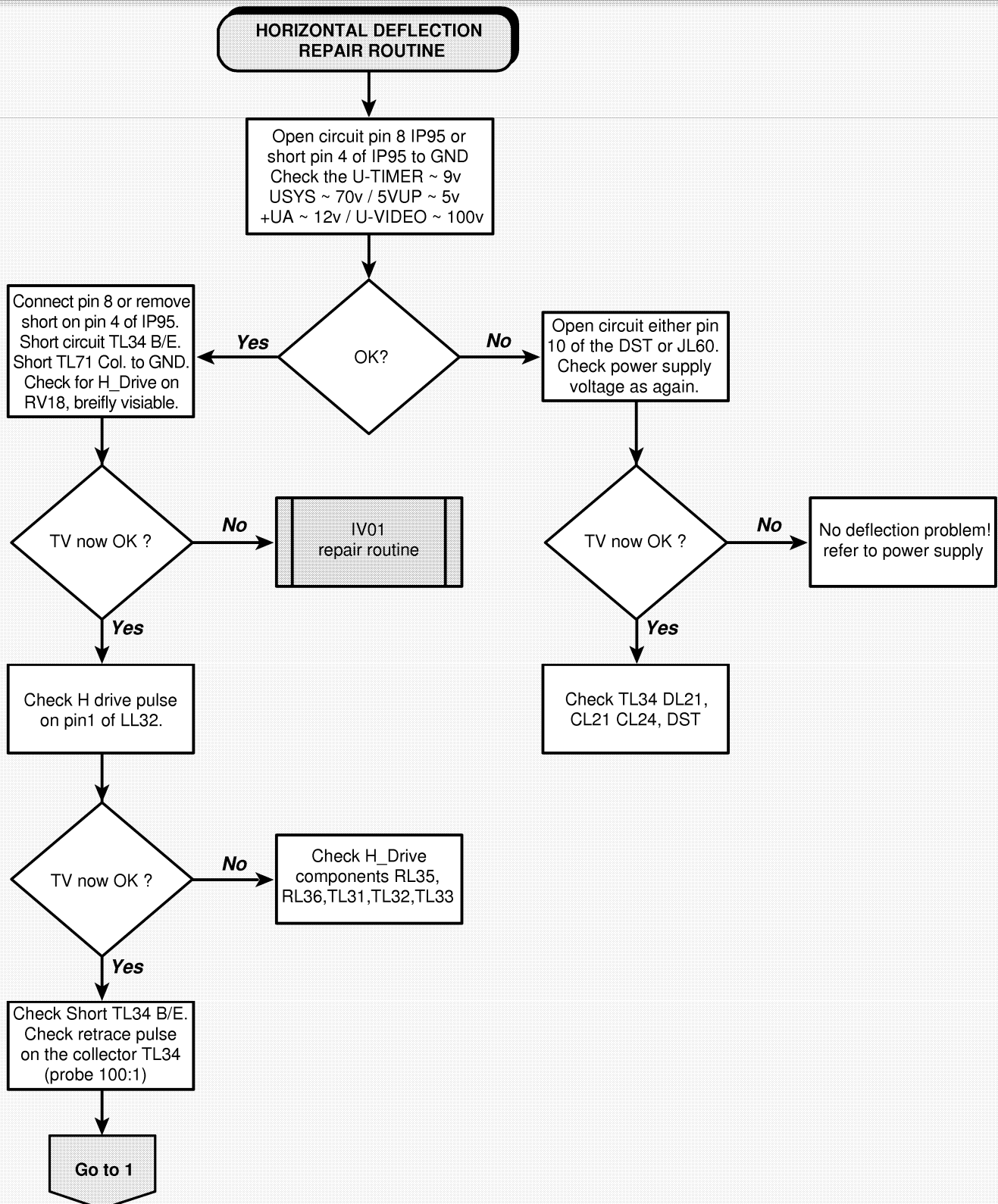
|               | LED-port |        |
|---------------|----------|--------|
|               | off      | on     |
| switched +8 V | off      | on     |
| on            | green    | orange |
| off           | off      | red    |

| CODES | DEFAULTS                                                                         |
|-------|----------------------------------------------------------------------------------|
| 12    | AUDIO-DPL DOES NOT ANSWER                                                        |
| 14    | TDA8855H DOES NOT ANSWER                                                         |
| 15    | AUDIO-MSP PROCESSOR NO LONGER RESPONDING                                         |
| 19    | TUNER DOES NOT ANSWER                                                            |
| 21    | SDA LINE BEING HELD LOW                                                          |
| 23    | CLOCK HELD AT LOW LEVEL, SCL LINE HELD AT A LOW LEVEL                            |
| 25    | SWITCHED 5V NOT AVAILABLE                                                        |
| 26    | TUBE DOES NOT GET WARM IN TIME                                                   |
| 27    | THE DEFLECTION STAGE HAS DETECTED A FAULT ON MORE THAN THREE OCCASIONS           |
| 28    | TDA VERTICAL GUARD VOLTAGE EXCEEDED                                              |
| 29    | TDA HORIZONTAL GUARD VOLTAGE EXCEEDED                                            |
| 31    | INTERNAL SOFTWARE ERROR                                                          |
| 32    | A SOFTWARE-TIMER HAS BEEN REQUESTED, BUT IS NOT YET AVAILABLE                    |
| 34    | THE NVM CHIP DOES NOT ANSWER                                                     |
| 35    | +13V IS NOT AVAILABLE                                                            |
| 36    | WRONG NVRAM ADDRESS PASSED TO THE BUS - HANDLER                                  |
| 37    | UNEXPECTED LEVEL ON NMI (INTERRUPT) LINE FOUND (POSSIBLE CAUSE : TUBE FLASHOVER) |
| 38    | HEAP FULL                                                                        |
| 41    | BUS (DATA LINE) NOT RECOVERABLE                                                  |

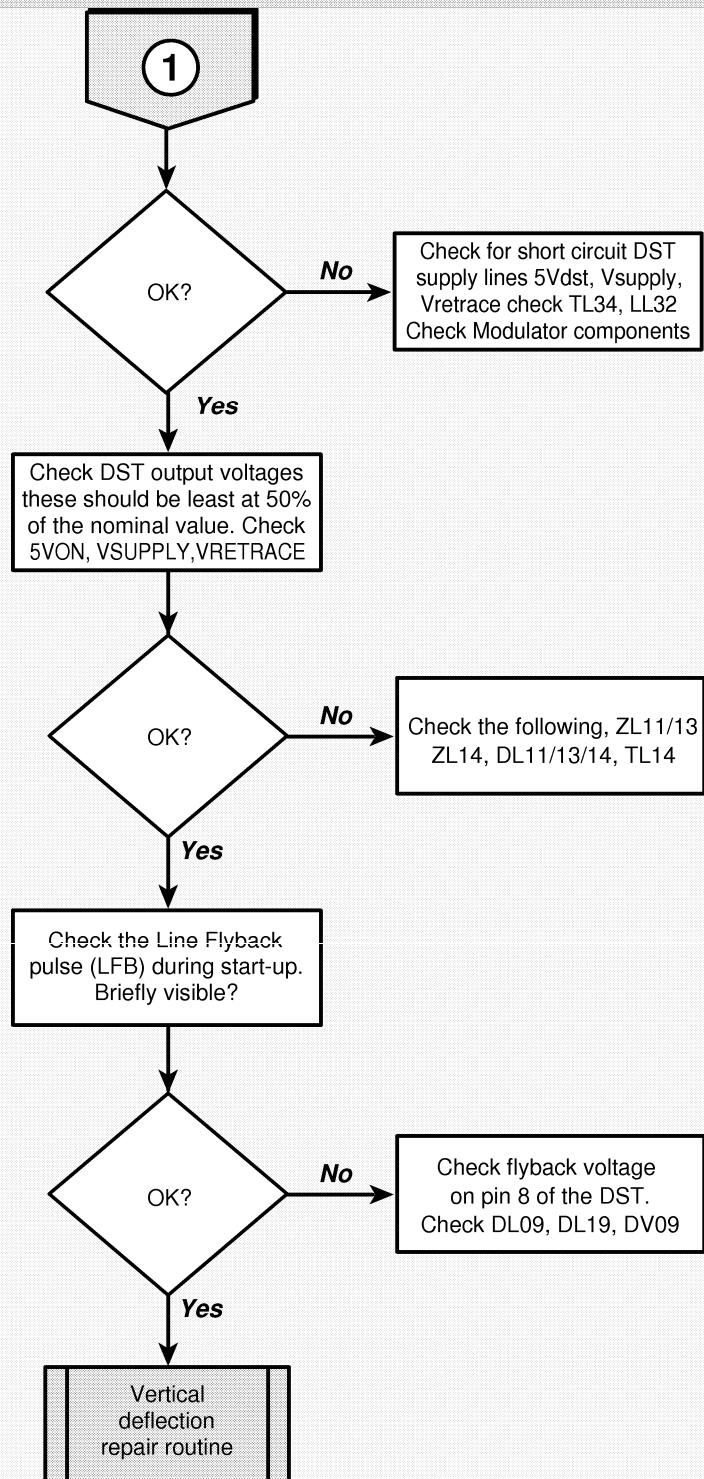
## DEFLECTION CIRCUIT CHECK



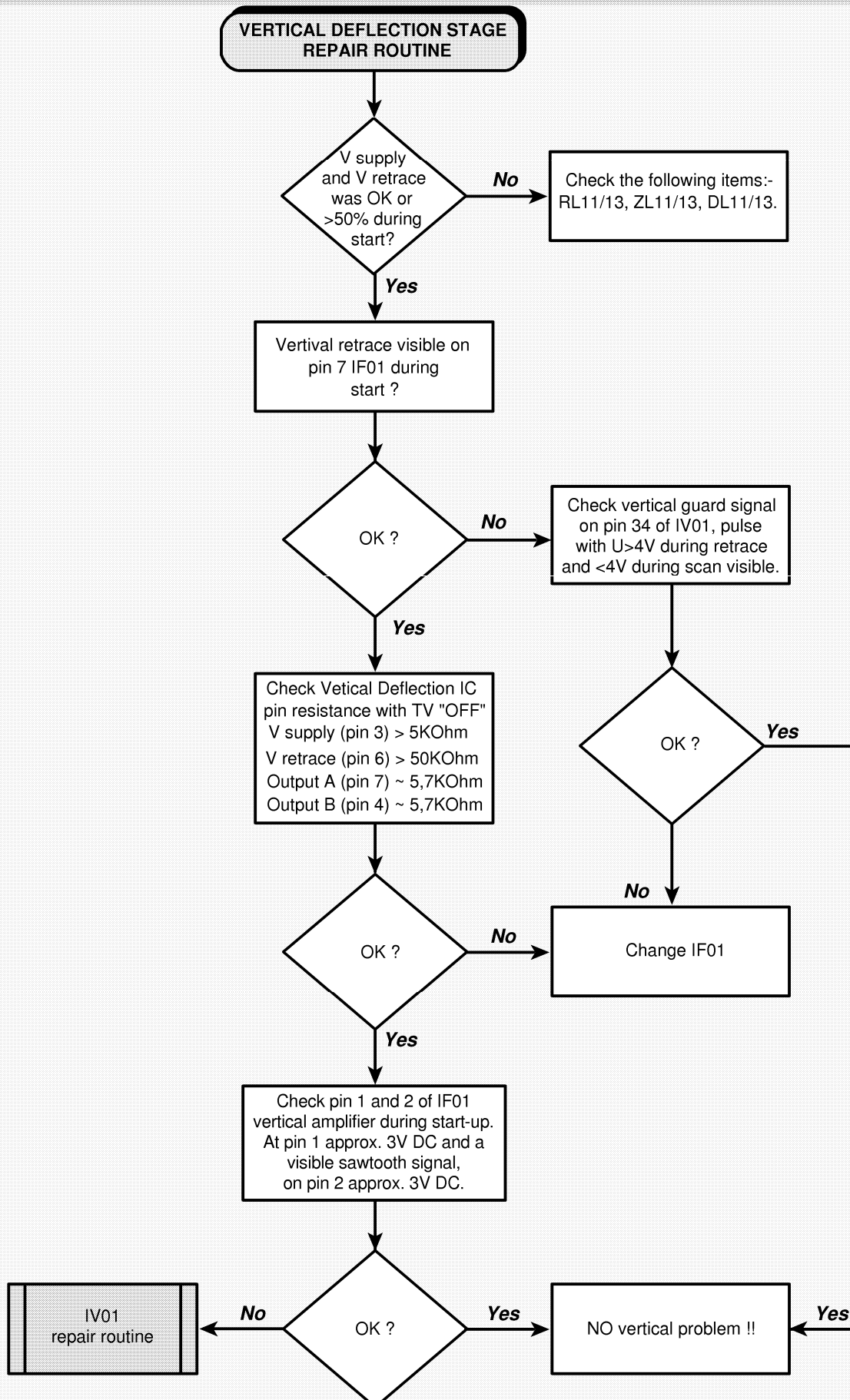
## DEFLECTION CIRCUIT CHECK



## DEFLECTION CIRCUIT CHECK

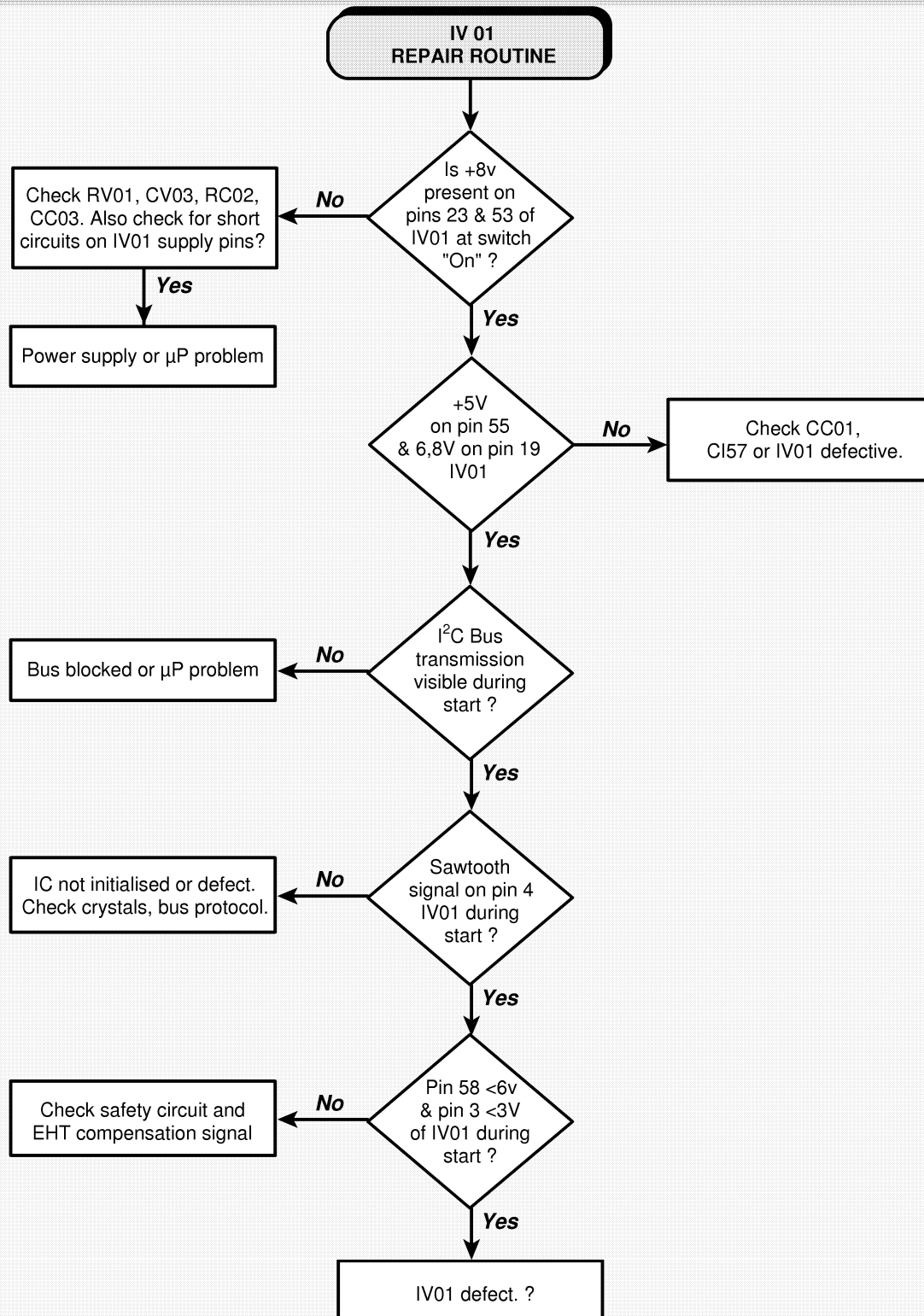


## DEFLECTION CIRCUIT CHECK

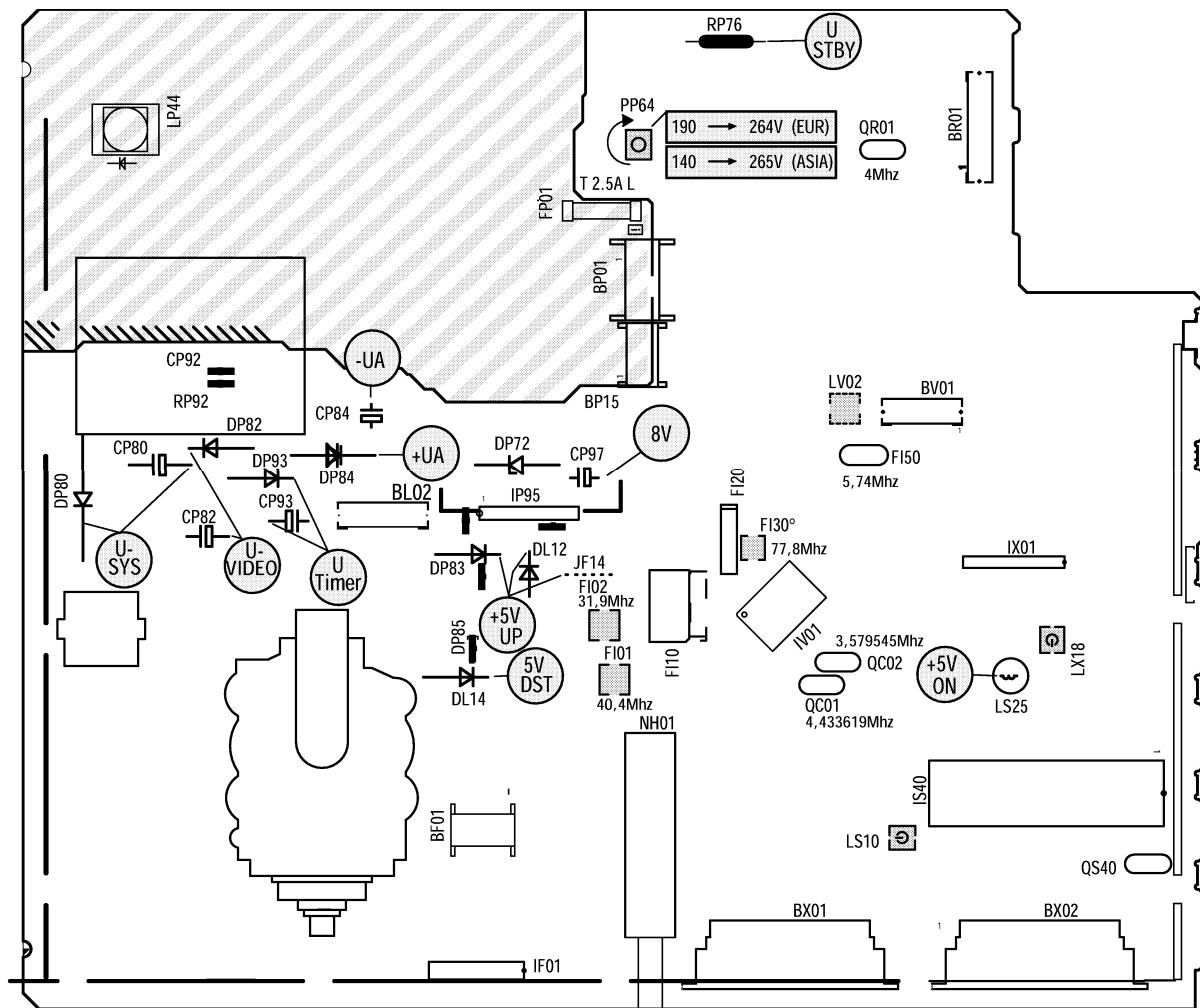




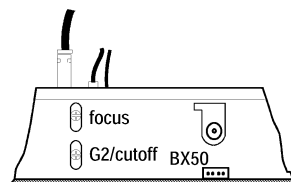
## DEFLECTION CIRCUIT CHECK



# LOCATION OF CONTROLS - EMBLACEMENT DES REGLAGES - SERVICE LAGEPLAN - POSIZIONE REGOLATORI DI SERVIZIO - SITUACIÓN DE LOS AJUSTES



° it is not necessary , to adjust F130 by after sales

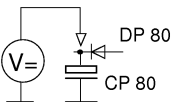
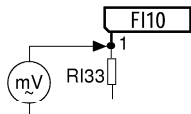
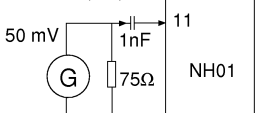
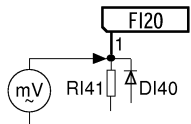
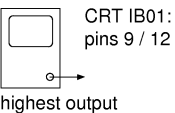
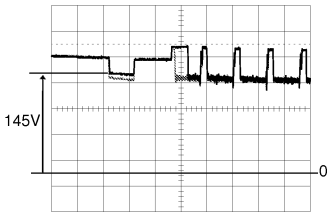


Part of board connected to mains supply.  
Partie du châssis reliée au secteur.  
Primärseite des Netzteils.  
Parte dello chassis collegata alla rete.  
Parte del chassis conectada a la red.



Use isolating mains transformer -  
Utiliser un transformateur isolateur du secteur -  
Trenntrafo verwenden -  
Utilizar un transformador aislador de red -  
Utilizzare un trasformatore per isolarvi dalla rete

# ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

| U Sys                         | PP 64                 |  = 50%<br>TV to AV1 : Black test pattern |    | <table border="1"> <thead> <tr> <th>Tube</th><th>Format</th><th>Usys</th><th>Jumper</th><th>RL65</th></tr> </thead> <tbody> <tr> <td>A51EBV13X01</td><td>4:3</td><td>128V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A51EFS83X191</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A59EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A66EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A59EGD048X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68EGD038X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68EGD038X70</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68AGA25X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A80AEJ15X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A80AEJ15X99</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>W56EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W66EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W76EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> </tbody> </table> | Tube | Format | Usys | Jumper | RL65 | A51EBV13X01 | 4:3 | 128V+/-0,5V | JL80 | 4k7 | A51EFS83X191 | 4:3 | 126V+/-0,5V | JL80 | 4k7 | A59EHJ43X15 | 4:3 | 132V+/-0,5V | JL81 | 24k | A66EHJ43X15 | 4:3 | 132V+/-0,5V | JL81 | 24k | A59EGD048X30 | 4:3 | 126V+/-0,5V | JL80 | 4k7 | A68EGD038X30 | 4:3 | 126V+/-0,5V | JL80 | 4k7 | A68EGD038X70 | 4:3 | 126V+/-0,5V | JL80 | 4k7 | A68AGA25X01 | 4:3 | 126V+/-0,5V | JL80 | 4k7 | A80AEJ15X01 | 4:3 | 126V+/-0,5V | JL80 | 4k7 | A80AEJ15X99 | 4:3 | 126V+/-0,5V | JL80 | 4k7 | W56EGV023X015 | 16:9 | 138V+/-0,5V | JL82 | 47k | W66EGV023X015 | 16:9 | 138V+/-0,5V | JL82 | 47k | W76EGV023X015 | 16:9 | 138V+/-0,5V | JL82 | 47k |
|-------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|------|--------|------|-------------|-----|-------------|------|-----|--------------|-----|-------------|------|-----|-------------|-----|-------------|------|-----|-------------|-----|-------------|------|-----|--------------|-----|-------------|------|-----|--------------|-----|-------------|------|-----|--------------|-----|-------------|------|-----|-------------|-----|-------------|------|-----|-------------|-----|-------------|------|-----|-------------|-----|-------------|------|-----|---------------|------|-------------|------|-----|---------------|------|-------------|------|-----|---------------|------|-------------|------|-----|
| Tube                          | Format                | Usys                                                                                                                      | Jumper                                                                              | RL65                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| A51EBV13X01                   | 4:3                   | 128V+/-0,5V                                                                                                               | JL80                                                                                | 4k7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| A51EFS83X191                  | 4:3                   | 126V+/-0,5V                                                                                                               | JL80                                                                                | 4k7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| A59EHJ43X15                   | 4:3                   | 132V+/-0,5V                                                                                                               | JL81                                                                                | 24k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| A66EHJ43X15                   | 4:3                   | 132V+/-0,5V                                                                                                               | JL81                                                                                | 24k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| A59EGD048X30                  | 4:3                   | 126V+/-0,5V                                                                                                               | JL80                                                                                | 4k7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| A68EGD038X30                  | 4:3                   | 126V+/-0,5V                                                                                                               | JL80                                                                                | 4k7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| A68EGD038X70                  | 4:3                   | 126V+/-0,5V                                                                                                               | JL80                                                                                | 4k7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| A68AGA25X01                   | 4:3                   | 126V+/-0,5V                                                                                                               | JL80                                                                                | 4k7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| A80AEJ15X01                   | 4:3                   | 126V+/-0,5V                                                                                                               | JL80                                                                                | 4k7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| A80AEJ15X99                   | 4:3                   | 126V+/-0,5V                                                                                                               | JL80                                                                                | 4k7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| W56EGV023X015                 | 16:9                  | 138V+/-0,5V                                                                                                               | JL82                                                                                | 47k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| W66EGV023X015                 | 16:9                  | 138V+/-0,5V                                                                                                               | JL82                                                                                | 47k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| W76EGV023X015                 | 16:9                  | 138V+/-0,5V                                                                                                               | JL82                                                                                | 47k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| iF Alignment<br>Alignement FI | trap 40.4Mhz<br>FI 01 | Switch set to standard BG<br>Commuter le TV au standard BG<br><br>iF Signal<br>40,4MHz (BG)<br>31,9MHz (BG)               |    | Adjust FI01 for minimum value at 40,4Mhz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
|                               | trap 31.9Mhz<br>FI 02 |                                          |    | Adjust FI02 for minimum value at 31,9Mhz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| U G2 / cutoff                 | SCREEN                |  = 50%<br>AV (no Signal, black screen)   |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |
| FOCUS                         | FOCUS<br>LL05         |  Test pattern<br>(standard values)     |  | Sharp picture                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |        |      |        |      |             |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |              |     |             |      |     |              |     |             |      |     |              |     |             |      |     |             |     |             |      |     |             |     |             |      |     |             |     |             |      |     |               |      |             |      |     |               |      |             |      |     |               |      |             |      |     |

## MODOSERVICIO

### I -ENTRADA/SALIDA MODO SERVICIO

#### 1 ACCESO AL MODO SERVICIO

##### Acceso con panel control TV

- Con el mando a distancia conectar a STANDBY el televisor.
- Desconectar el aparato con el interruptor de la red (esperar hasta que el LED se apague).
- Pulse los botones PR - y VOL - y sin soltarlos,pulsar la tecla MARCHE/PAUSA.
- Libere los botones PR - y VOL - (RS).

|             |            |      |
|-------------|------------|------|
| Soft Ver :  | V1.00.0    | 0080 |
| Config :    | As - - - N |      |
| Serial No : | 103465071  |      |
| ▶ QUIT      |            |      |
| TUBE        |            |      |
| SETUP       |            |      |
| GEOMETRY    |            |      |
| VIDEO       |            |      |
| IF          |            |      |

#### Nota :

En modo servicio:

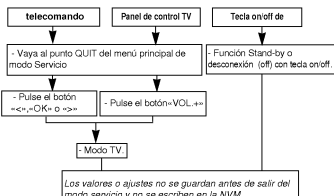
- Se ignora la función de bloqueo y se inicializa la función "cerradura niños".
- Anula todas las horas programadas
- La pantalla de SCART es ignorada
- La detección WSS AV Link, EPG, y Teletext son desactivados.
- El apagado automático en caso de ausencia de señal de antena es desactivado.
- El contraste,color y brillo son puestos a los valores de fábrica.
- la nitidez es puesta al punto medio.
- La expansión de contrast al nivel bajo
- Modo instalación es desactivado.
- Zoom y formato ignorados.

### 2 SALIDA TEMPORAL DEL MODO SERVICIO

- Pulse Salir en el mando a distancia
- Con el botón Menu puede acceder al menú de uso cotidiano.

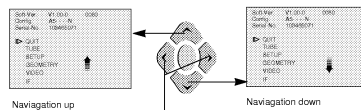
- Puede entrar al Menú Servicio con el botón azul.

### 3 SALIDA DEL MODO SERVICIO



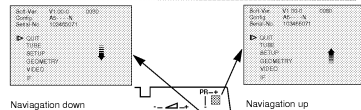
## II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE FUNCTIONS WALLIN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

### 1 REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA



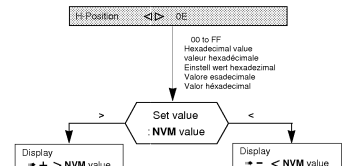
- Select option
- Option anwählen
- Selezionare l'opzione
- Selezionare opzione
- "Change" value
- Wert "finden"
- "Cambiare" valore
- "Cambiar" valor

### 2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE -



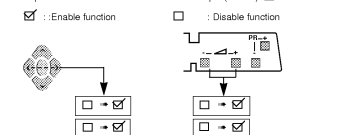
- Select option
- Option anwählen
- Selezionare l'opzione
- Selezionare opzione
- "Change" value
- Wert "finden"
- "Cambiare" valore
- "Cambiar" valor

### 3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELL WERTS VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - VISUALIZACION DEL VALOR DE AJUSTE



### 4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALT FUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCIÓN CONMUTACION

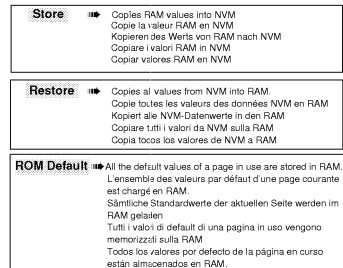
To enable a function check ☒ the box.  
Pour valider une fonction cocher ☒ la case correspondante  
Zum Implementieren einer Funktion das Kontrollkästchen ☒ aktivieren (anzukreuzen)  
Per implementare una funzione d' verifica, (vietare) ☒ la casella  
Para poner en funcionamiento una función verifique (señale) ☒ la casilla



### 5 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZARE I VALORI - VALORES ALMACENADOS EN LA MEMORIA

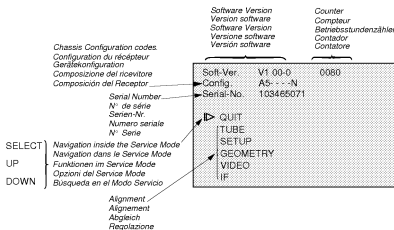
After setting, the values are stored in NVM.  
Après réglages les valeurs sont mémorisées en NVM.  
Nach dem Einstellen werden die Werte im NVM gespeichert.  
Dopo la regolazione i valori vengono memorizzati in NVM.  
Después del ajuste, los valores son almacenados en NVM

The box ☐ becomes ☒  
During alignment, values are temporarily stored in RAM.  
En cours d'alignement les valeurs sont mémorisées temporairement en RAM  
Während des Abgleichs werden die Werte vorübergehend im RAM gespeichert  
Durante l'allineamento i valori vengono memorizzati provvisoriamente sulla RAM  
Durante el ajuste, los valores son almacenados temporalmente en RAM



## III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

### 1 MAIN MENU - MENU PRINCIPAL



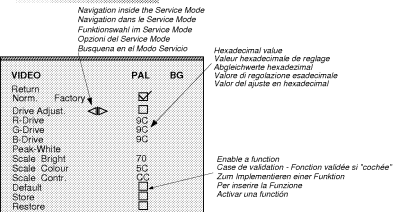
### TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURAZIONE DEL TV - CONFIGURACIÓN DEL TV

|                 |                                                   |
|-----------------|---------------------------------------------------|
| Config.         | A1Z-DKC                                           |
| Character 1 :   | Tube type : «A»= 4/3 , «W» =16/9                  |
| Character 2 :   | Chassis type : «S» = 50Hz,                        |
| Character 3 :   | Zoom available : «Z»=yes, «>»=not                 |
| Character 4 :   | Ambiant Sensor : «S»= detected, «>»= not          |
| Character 5 :   | Dolby : «D»=detected, «>»= not                    |
| Character 6 :   | AV Link detected : «K»=IR link detected, «>»= not |
| Character 7 :   | Chassis Variant : «N»= Nicam, «S»=Stereo          |
| Serial-No.      | A1B-----                                          |
| Character 1 :   | Factory : «A»= Angers , «C» =Celle, «T» =Tarancon |
| Character 2 :   | Year : «G» = 1996 , «H»= 1997 etc.                |
| Character 3 :   | Month, from : «1»=January to «C»=December         |
| Character 4-9 : | Serial No.                                        |

### TIME COUNTER - COMPTEUR DE TEMPS - BETRIEBSSTUNDENZÄHLER - CONTATORE - CONTADOR

The counter indicates the TV's number of service hours. It counts from 0 to 65535 hours.  
The display is hexadecimal.  
The counter de temps indique le nombre d'heures de service du TV. Il compte de 0 à 65535 heures. L'affichage est en hexadecimal.  
Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadecimal.  
Il contatore indica il numero di ore di servizio del TV. Può contare da 0 a 65535. La visualizzazione è esadecimale.  
El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

### 2 SUBMENU - SOUS-MENU



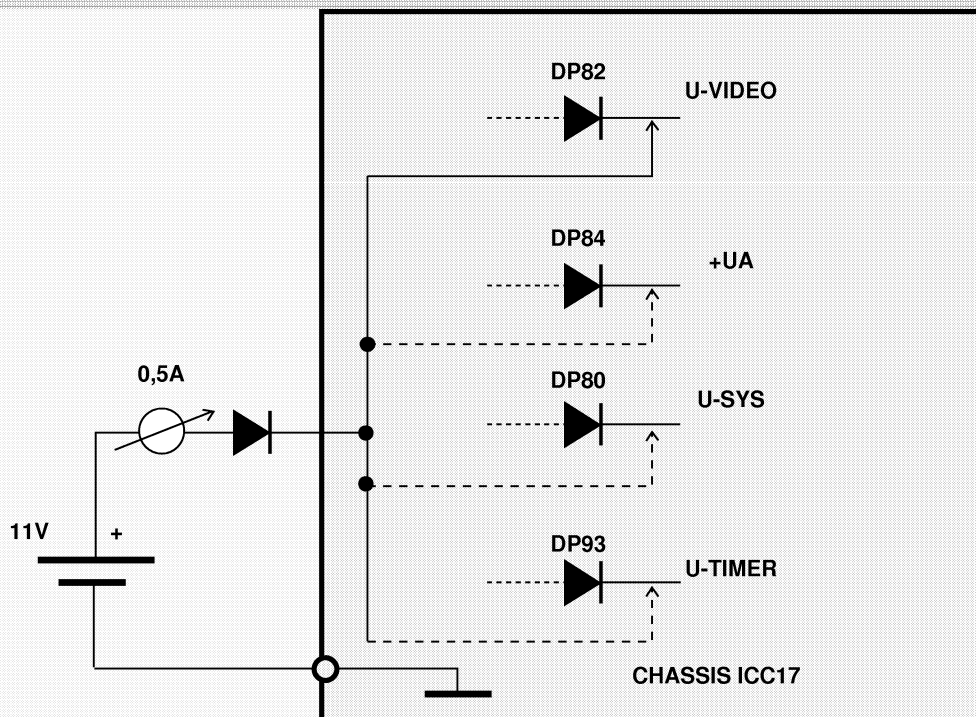


## SECONDARY DC-VOLTAGES

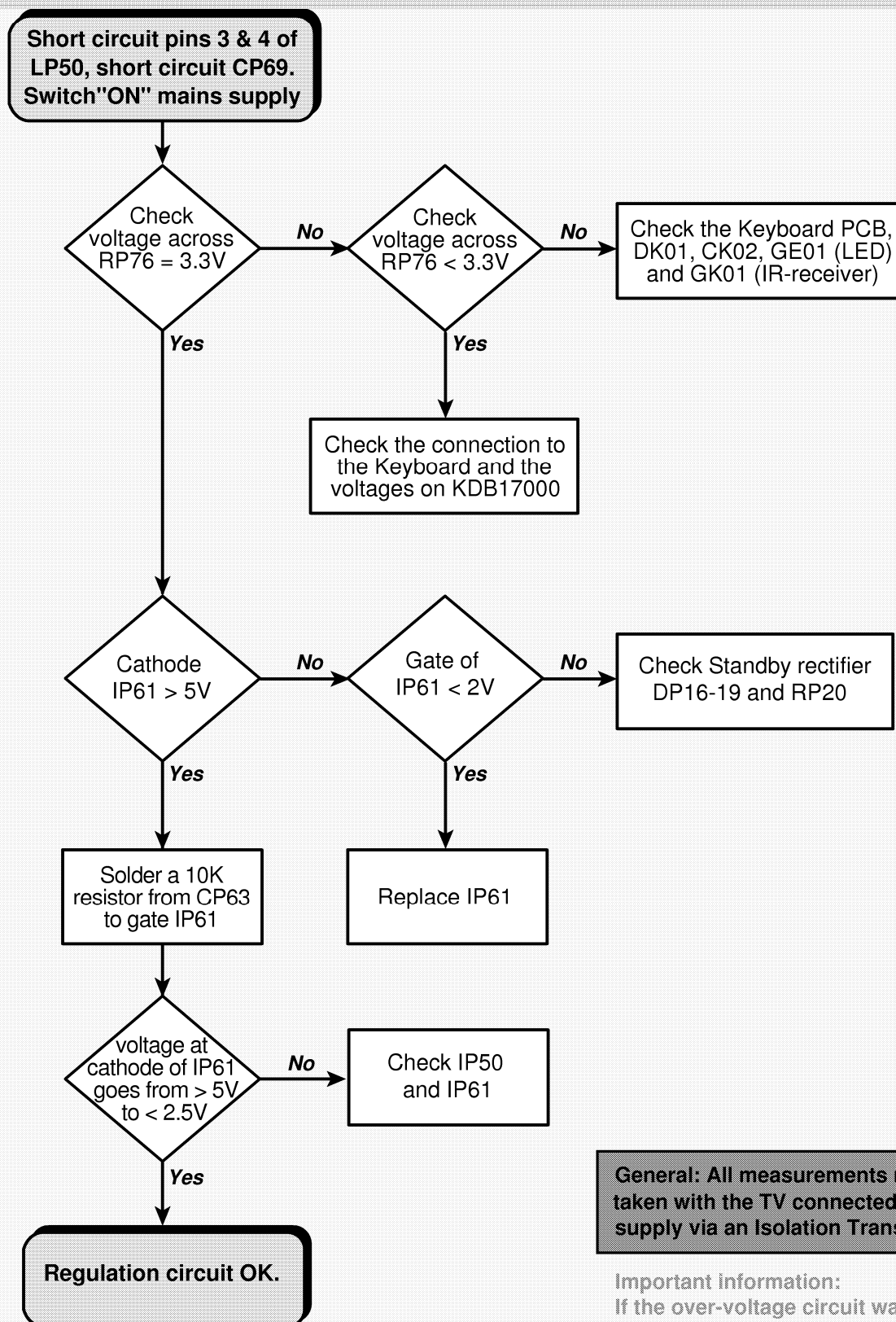
*All measurements in this chapter must be done WITHOUT the mains supply connected to the TV.*

*Test circuit:*

*The external voltage source is provided by a variable DC-power supply with its output voltage set to 11V and the current limitation set to 500mA's. The negative terminal of the DC-power supply must be directly connected to the chassis secondary ground plane. The positive terminal of the DC-power supply is first connected to an ammeter and then the anode of an isolation diode. The cathode of the isolation diode is then connected to the load on the chassis as shown below. Measure the current drawn by each load tested.*



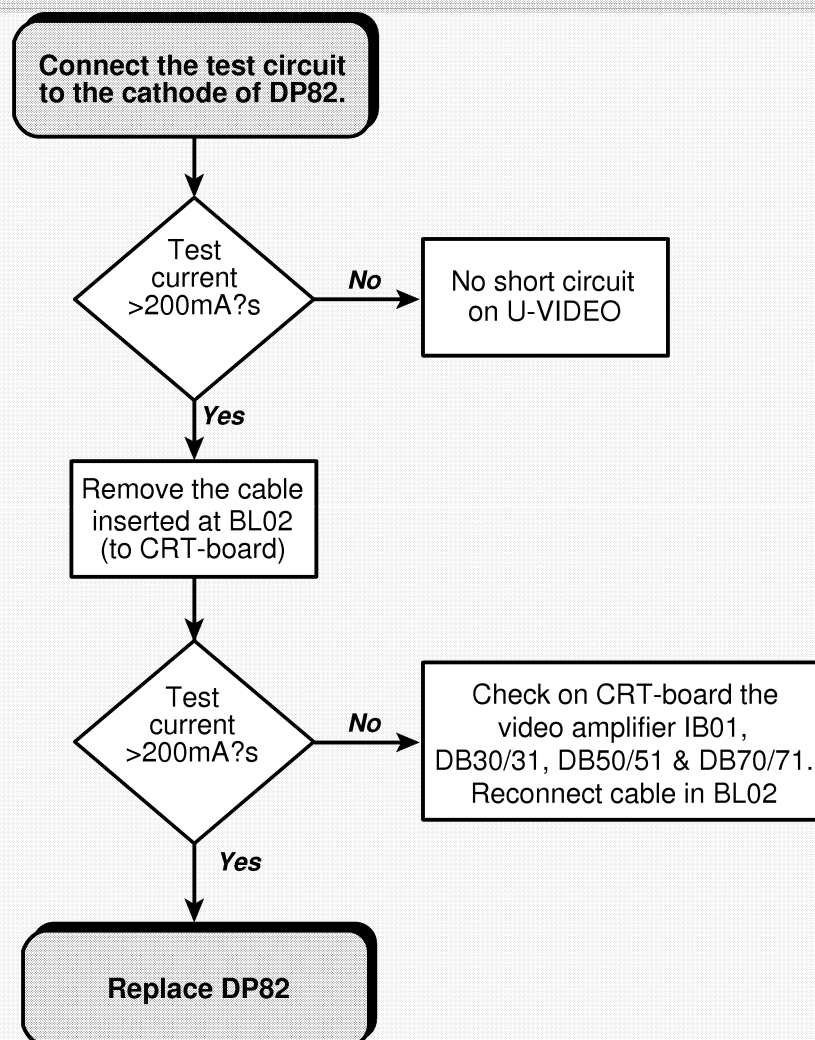
## STANDBY POWER SUPPLY - SECONDARY SIDE



After finishing this test, please remove the short circuits from pins 3/4 of LP50 and CP69 also remove the 10k resistor.



## POWER SUPPLY - SECONDARY SIDE : U-VIDEO

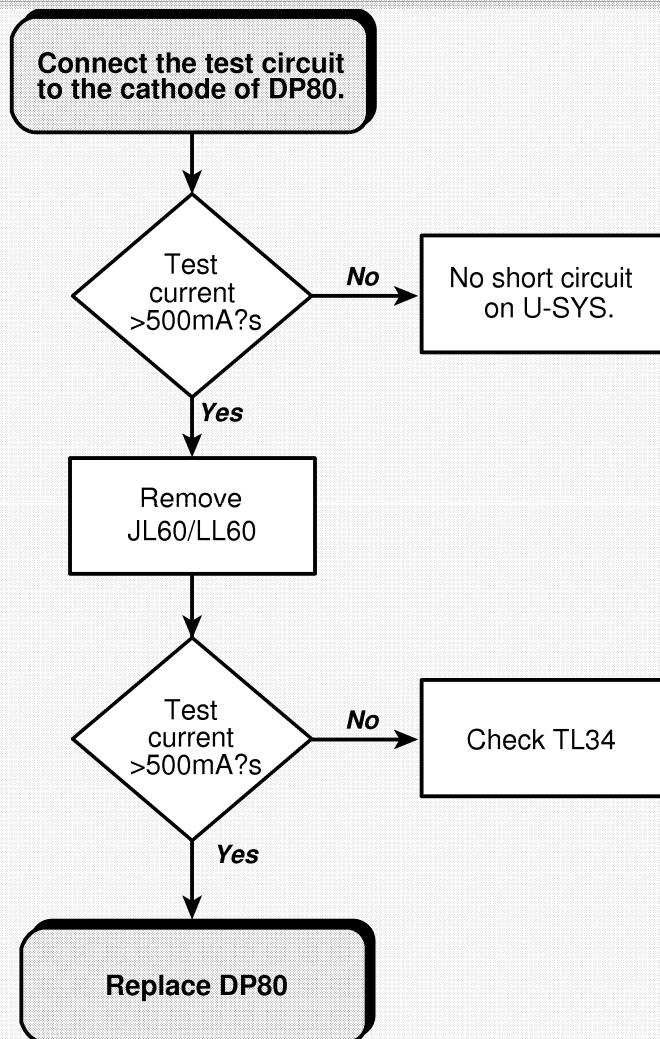


After finishing this test, please replace cable BL02 and remove the test circuit.

**General: All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.**

**Important information:**  
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

## POWER SUPPLY - SECONDARY SIDE : U-SYS



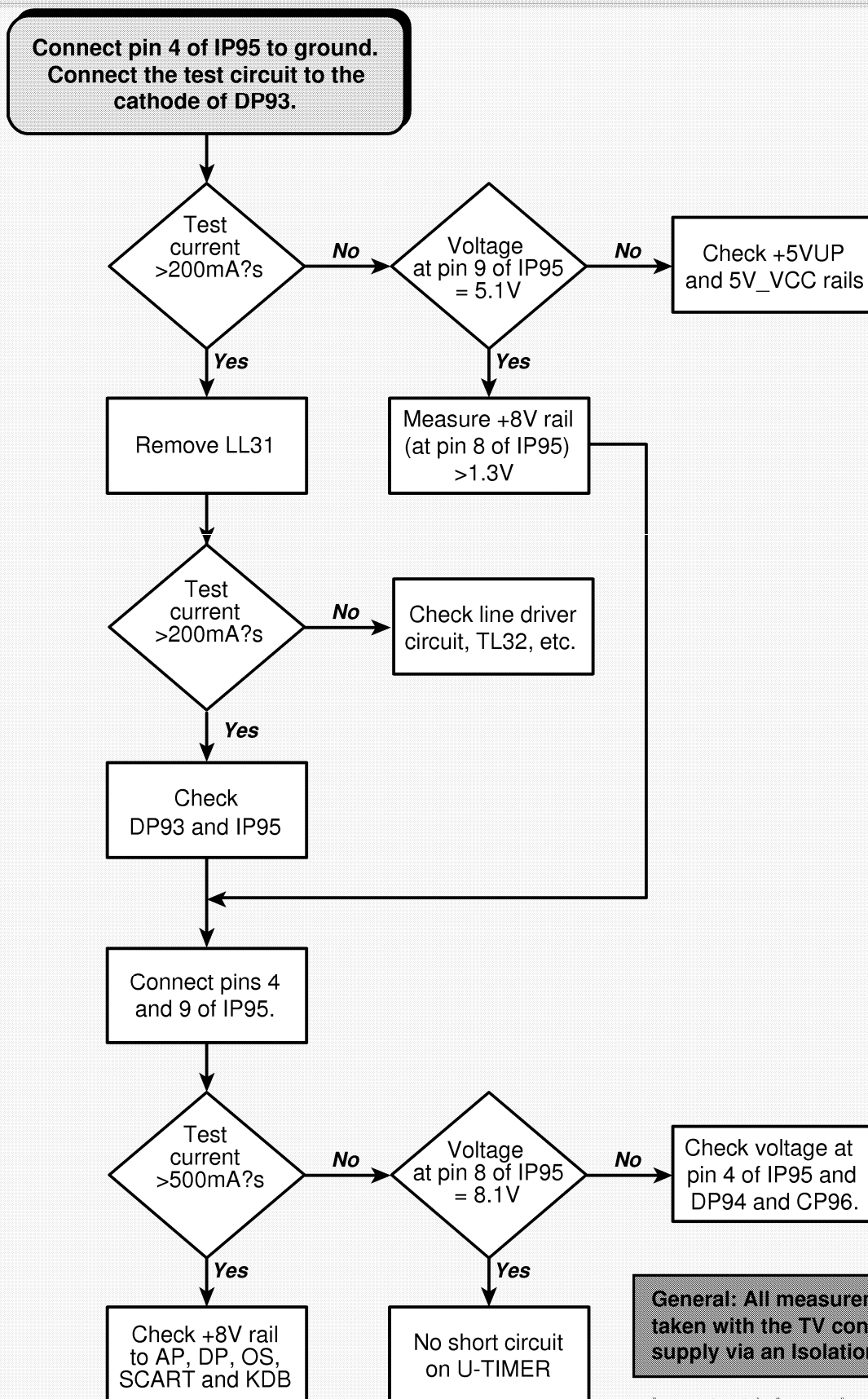
After finishing this test, please replace JL60/LL60 and remove the test circuit.

**General:** All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.

**Important information:**

If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

## POWER SUPPLY - SECONDARY SIDE : U-TIMER

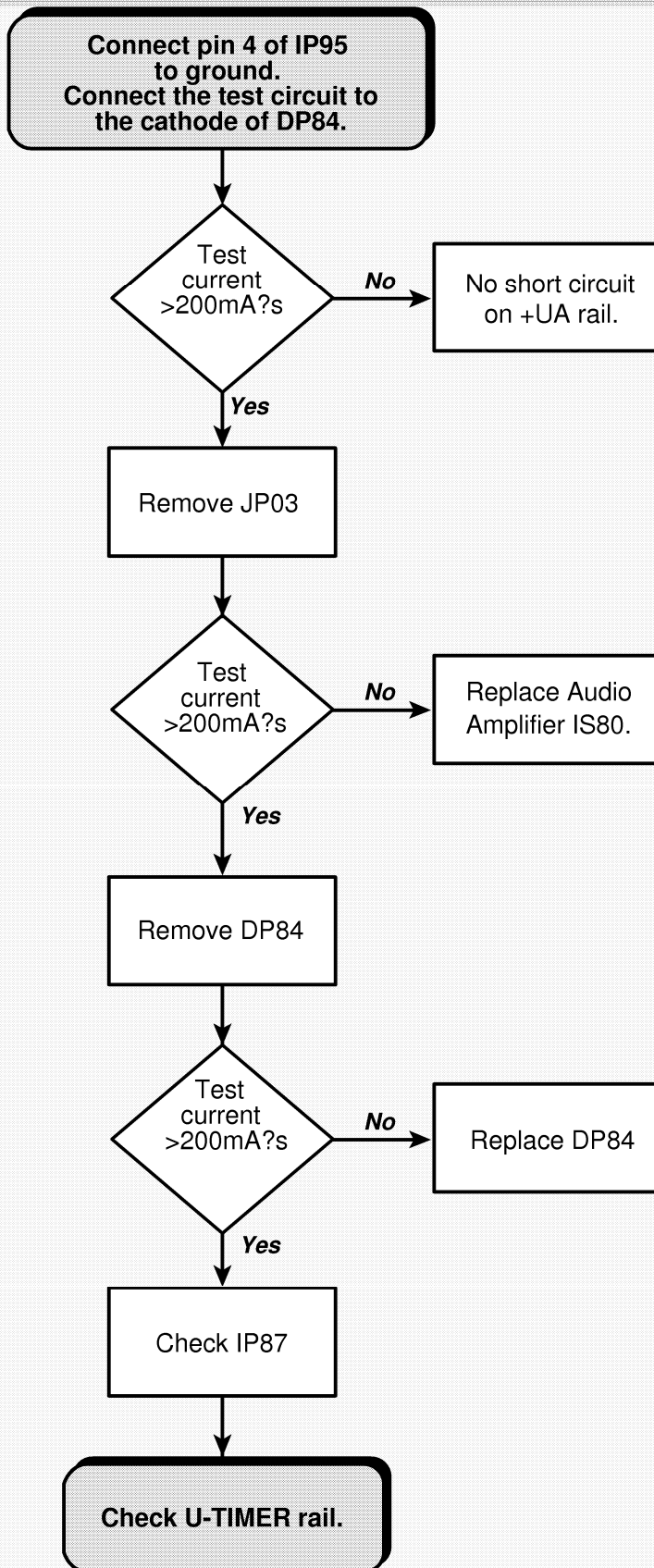


After finishing this test, please replace LL31, remove the link between pins 4 and 9 of IP95 and remove the test circuit.

### Important information:

If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

## POWER SUPPLY - SECONDARY SIDE : +UA



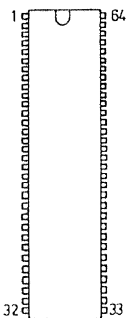
**General:** All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.

**Important information:**  
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

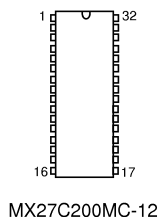
|                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS- ABKÜRZUNGEN</b><br/> <b>LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES</b></p> |
|------------------------------------------------------------------------------------------------------------------------------------------|

|                       |                                                                                                |
|-----------------------|------------------------------------------------------------------------------------------------|
| ● <b>+USYS:</b>       | System voltage                                                                                 |
| ● <b>+U_VIDEO:</b>    | Video drive voltage for the CRT board                                                          |
| ● <b>+ STDBY_ON:</b>  | Standby data (0V standby , 0.6v switched ON)                                                   |
| ● <b>+5V DST:</b>     | 5v unregulated voltage from the DST<br>to supply the tuner and audio MSP device                |
| ● <b>+5V ON:</b>      | 5v regulated voltage from the DST<br>to supply the tuner and audio MSP device                  |
| ● <b>+5V UP :</b>     | Microprocessor supply voltage                                                                  |
| ● <b>BCL:</b>         | Beam current limiting information                                                              |
| ● <b>CVBS:</b>        | Composite video / luminance signal                                                             |
| ● <b>CVBS_OUT:</b>    | Composite video output                                                                         |
| ● <b>CVBS_TXT:</b>    | Composite video for teletext extraction                                                        |
| ● <b>DEGAUSS:</b>     | Degauss signal                                                                                 |
| ● <b>EW :</b>         | East / West                                                                                    |
| ● <b>FORMAT / BC:</b> | Full white control DATA depending on<br>16/9 selected format                                   |
| ● <b>HDRV:</b>        | Horizontal deflection signal                                                                   |
| ● <b>HTR1 / HTR2:</b> | Heater voltage from the DST to CRT PCB                                                         |
| ● <b>LFB:</b>         | Line Fast Blanking                                                                             |
| ● <b>MUTE :</b>       | Mutes audio amplifiers                                                                         |
| ● <b>PO:</b>          | "Power ON " IP95 : reset activated and output = 8v<br>"PO" = 5v when TV is working in normally |
| ● <b>POWER_FAIL:</b>  | Detection of mains supply and deflection stage failures                                        |
| ● <b>RESET:</b>       | Microprocessor reset signal                                                                    |
| ● <b>SAFETY:</b>      | Safety information from the deflection stage                                                   |
| ● <b>SCL:</b>         | Serial Clock                                                                                   |
| ● <b>SDA :</b>        | Serial Data                                                                                    |
| ● <b>SIF:</b>         | Sound IF                                                                                       |
| ● <b>TRAP_INFO:</b>   | 31.4Mhz IF trap activation                                                                     |
| ● <b>U_STANDBY:</b>   | Standby voltage                                                                                |
| ● <b>U_DRIVER:</b>    | Horizontal sync signal from TDA8855H                                                           |
| ● <b>U_TIMER:</b>     | 11v voltage used during "Switch ON " phase<br>and "Wake Up" mode                               |
| ● <b>V FLB:</b>       | Vertical flyback reference for the microprocessor                                              |
| ● <b>V GUARD:</b>     | Safety data generated by the vertical amplifier<br>TDA 8351                                    |
| ● <b>V_RETRACE:</b>   | 42 / 48volts (depending on tube type) generated by<br>the DST and used for vertical blanking   |
| ● <b>V_SUPPLY:</b>    | 13.5 to 15.5 volts (depending on tube type) generated<br>by the DST                            |

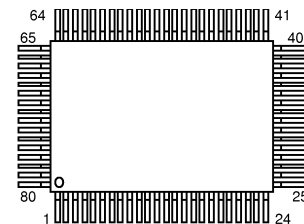
# INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE - CIRCUITS INTEGRES ET TRANSISTORS INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN - CIRCUITI INTEGRATI TRANSISTOR CIRCUITOS INTEGRADOS Y TRANSISTORES



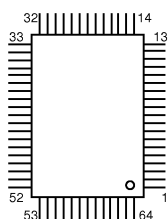
MPS3400C-PP-C6



MX27C200MC-12



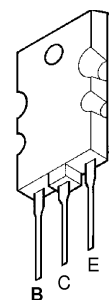
ST92R195



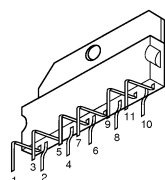
TDA8855H



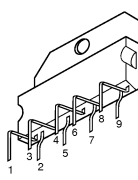
TDA8351



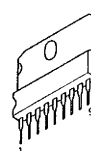
BUH516TH16



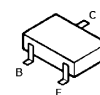
TDA7269



TDA6107Q



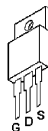
TDA 8139



BC 847B  
 BC 857B  
 BCR141  
 BCR191  
 DTC113ZK  
 DTC144EK  
 TN1401



ST24C08-M  
 TS3702CD



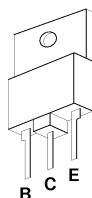
STP6 NA60F1



BT806 -600C



MC7812/CT



BD241C



BC 337  
 BC 546B  
 BC 547B



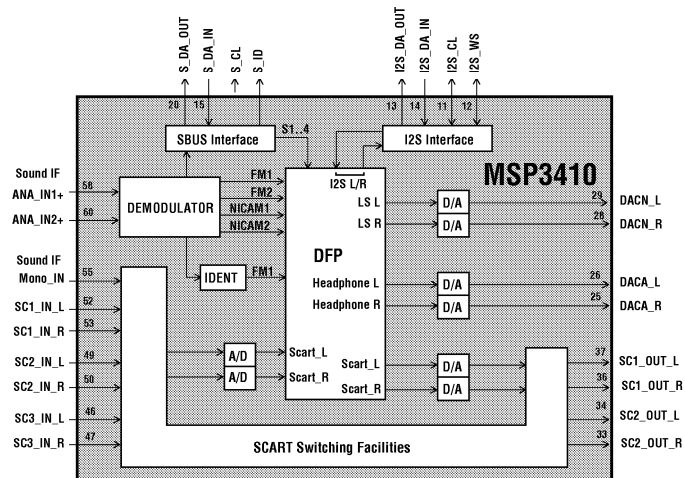
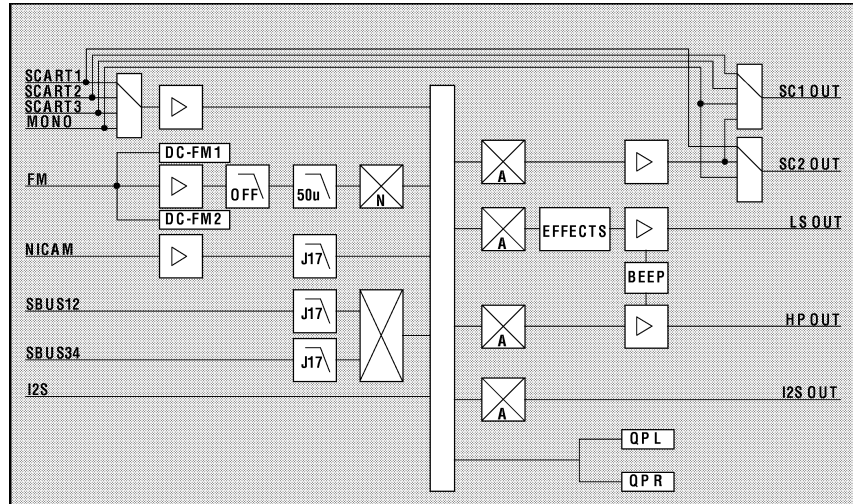
BF 422  
 BF423  
 2SA1020Y  
 2SC2236Y



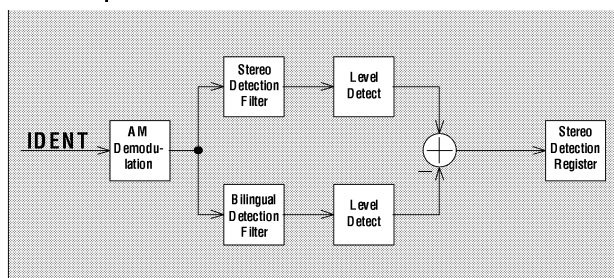
MPS750

# INTEGRATED CIRCUITS BLOCK DIAGRAMS - SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES - INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBIlder SCHEMA A BLOCCHI DEI CIRCUITI INTEGRATI - VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS

Audio baseband processing of the MSP3410

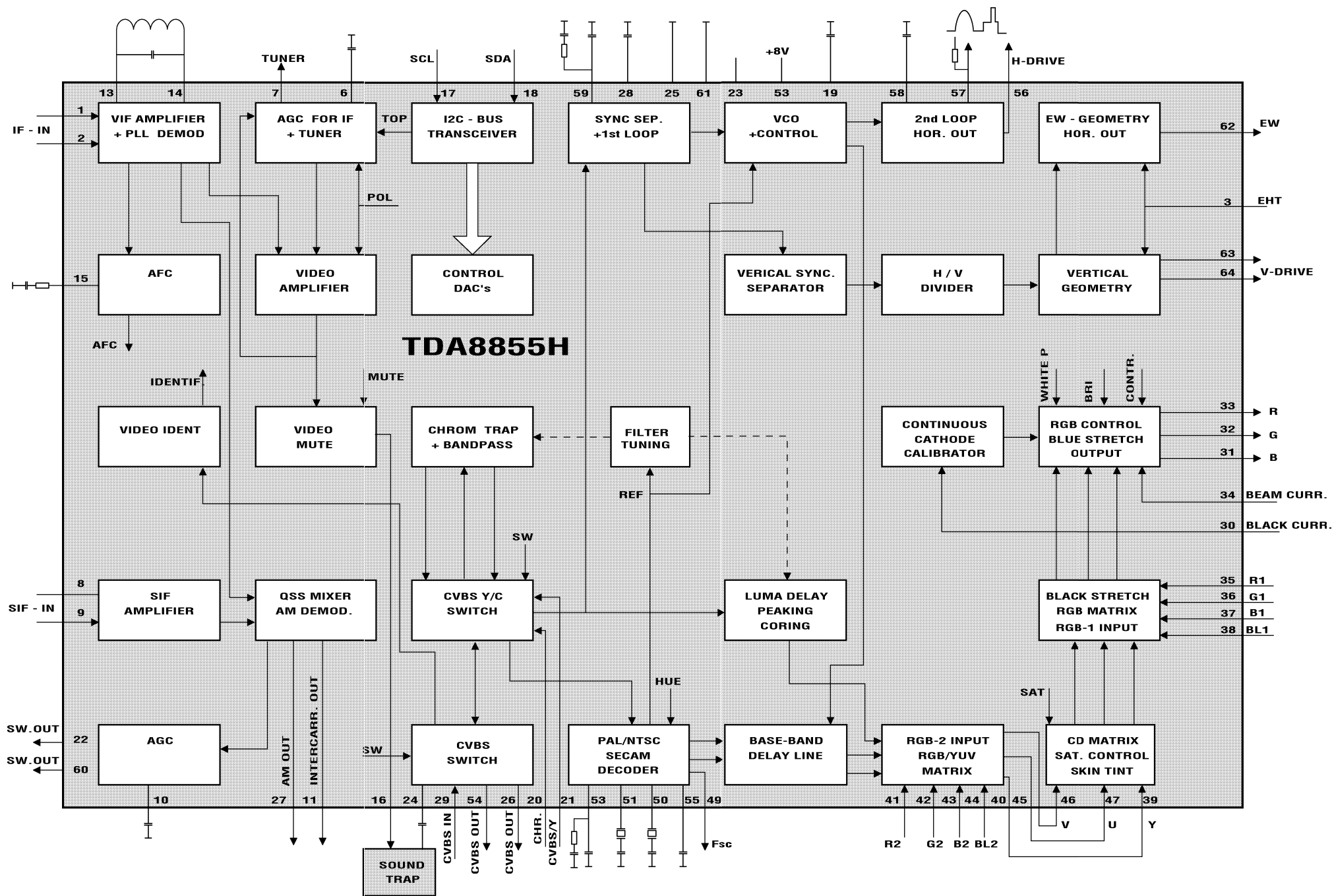


Detection part of the MSP 3410



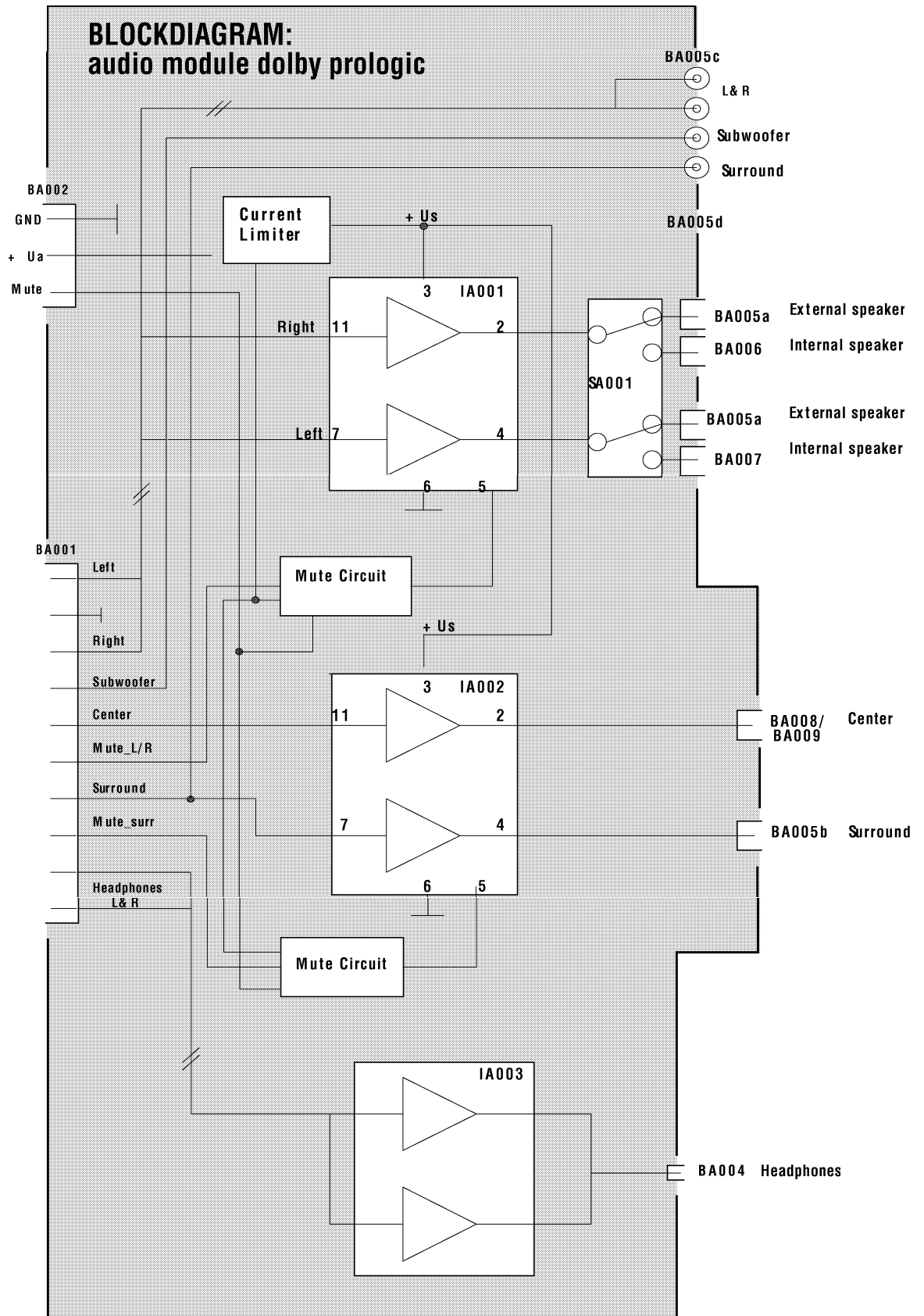


IV01 TDA 8855H

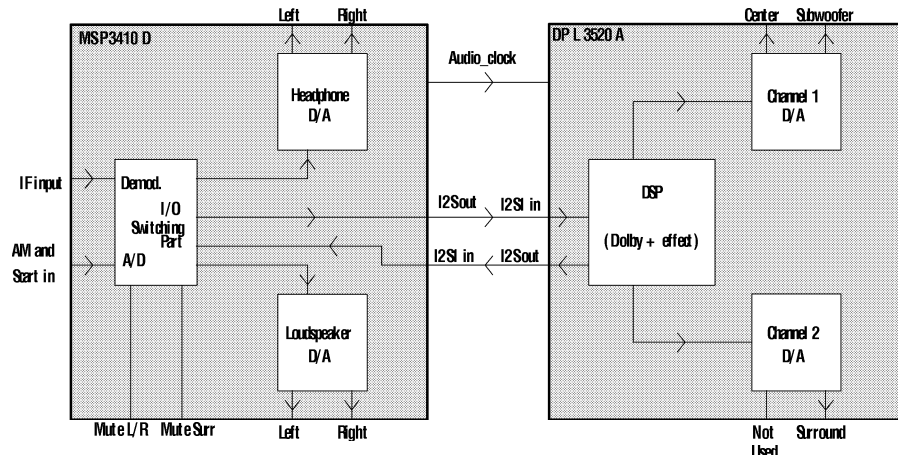




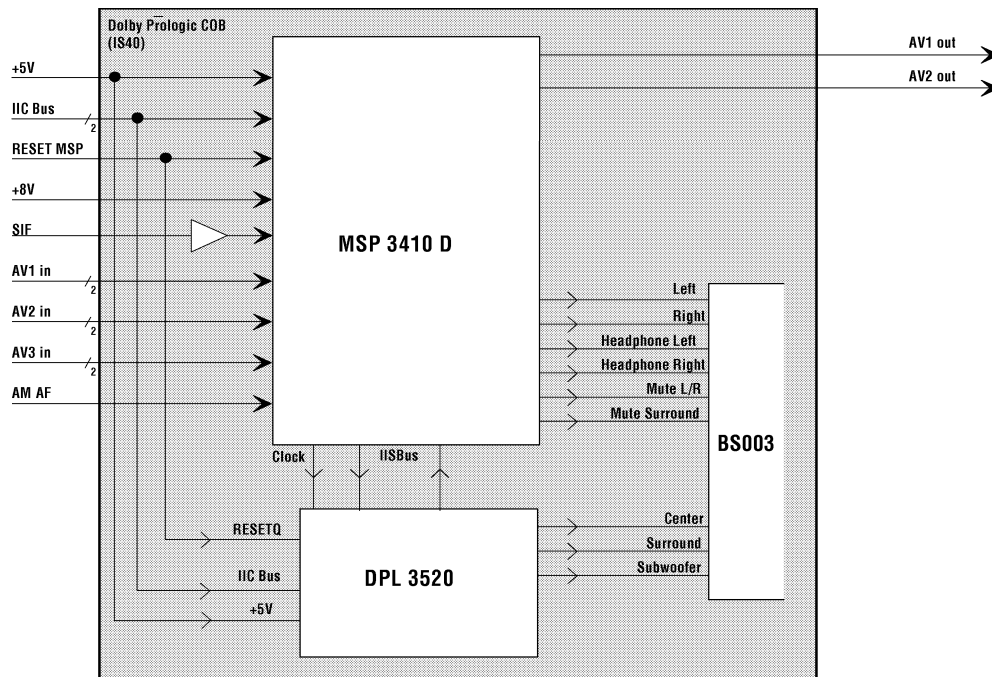
**BLOCK DIAGRAM (AUDIO MODULE DOLBY PROLOGIC)**  
**SCHEMA SYNOPTIQUE (AUDIO MODULE DOLBY PROLOGIC)**  
**BLOCKSCHALTBIID (AUDIO MODULE DOLBY PROLOGIC)**  
**SCHEMA A BLOCCI (AUDIO MODULE DOLBY PROLOGIC)**  
**ESQUEMA DE BLOQUES (AUDIO MODULE DOLBY PROLOGIC)**



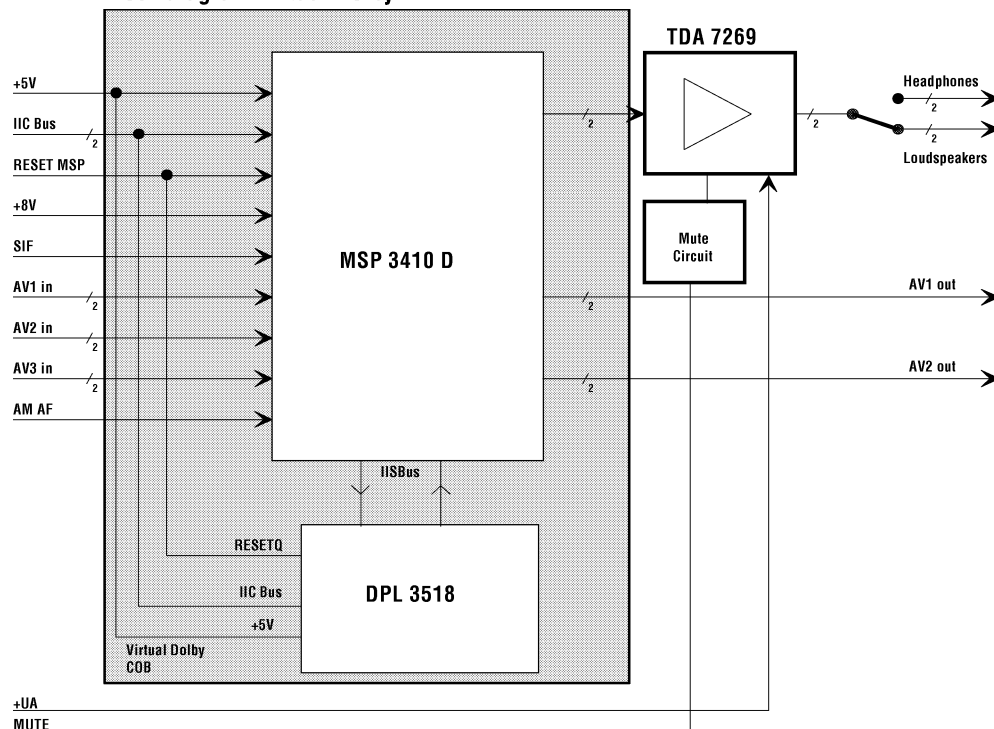
## Interface requirement audio part with Dolby Prologic



## Block diagram Dolby Prologic



## Block diagram Virtual Dolby





## EACEM - CÓDIGOS DE SECCIÓN

| COMÚN  |                                     |
|--------|-------------------------------------|
| ANT    | SECCIÓN DE LA ANTENA                |
| APR    | PROCESADO DE SEÑALES (ANALÓGICO)    |
| BCH    | CARGA DE BATERÍA                    |
| CLK    | SECCIÓN DE RELOJ                    |
| CPA    | PROCESADO DE COLOR ANALÓGICO        |
| CTR    | PANEL DE CONTROL                    |
| DPR    | PROCESADO DE SEÑALES (DIGITAL)      |
| ERA    | CIRCUITO DE BORRADO                 |
| FLX    | PLACA FLEXIBLE                      |
| HFS    | SECCIÓN DE ALTA FRECUENCIA          |
| IDS    | SECCIÓN DEL DISPLAY DE INFORMACIÓN  |
| IFC    | CIRCUITO FI                         |
| ILN    | SECCIÓN i.LINK (IEEE1394)           |
| INP    | SECCIÓN DE ENTRADA DE SEÑALES       |
| IRD    | SECCIÓN INFRA-ROJOS (IRDA)          |
| MEM    | SECCIÓN DE MEMORIA                  |
| OUT    | SECCIÓN DE SALIDA DE SEÑALES        |
| PRG    | SECCIÓN DE PROGRAMACIÓN             |
| PRT    | CIRCUITO DE PROTECCIÓN              |
| PSU    | ALIMENTACIÓN                        |
| PWA    | SECCIÓN DEL AMP DE POTENCIA         |
| REM    | SECCIÓN DEL CONTROL REMOTO          |
| RFU    | AMPLIFICADOR/UNIDAD RF              |
| SFT    | SOFTWARE (CINTA/DISCO/ETC.)         |
| SNS    | UNIDAD DE DETECCIÓN                 |
| SVO    | SECCIÓN DE SERVO                    |
| SYS    | SECCIÓN DEL SISTEMA DE CONTROL      |
| TUN    | SECCIÓN DE SINTONIZACIÓN            |
| TXT    | PROCESADO DE TEXTOS                 |
| SONIDO |                                     |
| APA    | PROCESADO DE AUDIO ANALÓGICO        |
| APD    | PROCESADO DE AUDIO DIGITAL          |
| CDC    | SECCIÓN CAMBIADOR CD                |
| CDS    | SECCIÓN CD                          |
| MDC    | SECCIÓN CAMBIADOR MD                |
| MDS    | SECCIÓN MINIDISC                    |
| MIC    | SECCIÓN DE MICRÓFONO                |
| PUD    | DISPOSITIVO CAPTADOR                |
| SHD    | CABEZAS FIJAS                       |
| SPK    | ALTAVOZ                             |
| IMAGEN |                                     |
| CAM    | CIRCUITO CÁMARA                     |
| CPD    | PROCESADO DE COLOR DIGITAL          |
| CRT    | TUBO DE IMAGEN                      |
| DFL    | CIRCUITO DE DEFLEXIÓN               |
| DVD    | SECCIÓN DVD                         |
| FPK    | CONJUNTO DE ENFOQUE                 |
| IMG    | UNIDAD DE VISUALIZACIÓN DE IMÁGENES |

| IMAGEN   |                                        |
|----------|----------------------------------------|
| LCD      | SECCIÓN LCD                            |
| LMP      | SECCIÓN FLASH/LÁMPARA                  |
| VPA      | PROCESADO DE VIDEO ANALÓGICO           |
| VPD      | PROCESADO DE VIDEO DIGITAL             |
| VWF      | VISOR                                  |
| PC       |                                        |
| FDD      | EXCITADOR DEL FLOPPY DISC              |
| FMW      | PROGRAMACIÓN FIJA                      |
| HDD      | EXCITADOR DEL DISCO DURO               |
| ISA      | SECCIÓN ISA                            |
| JST      | JOYSTICK                               |
| KBD      | TECLADO                                |
| MDM      | SECCIÓN MODEM                          |
| NIF      | RED DE INTERCONEXIÓN                   |
| PAR      | PUERTA PARALELO                        |
| PCC      | TARJETA PC                             |
| PCI      | SECCIÓN PCI                            |
| SCS      | PUERTA SCSI                            |
| SER      | PUERTA SERIE                           |
| USB      | PUERTA USB                             |
| MECÁNICO |                                        |
| ARM      | MECANISMO DEL BRAZO                    |
| BZL      | BEZEL (MUEBLE FRONTAL)                 |
| CBT      | MUEBLE                                 |
| CHA      | CHASIS                                 |
| DDM      | SECCIÓN DE ACCIONAMIENTO DEL DISCO     |
| EXC      | CONECTOR EXTERNO                       |
| HCM      | MECANISMO DE SOPORTE DE LA CABEZA      |
| HOL      | SOPORTE DE CASSETTE                    |
| INC      | CONECTOR INTERNO                       |
| LDG      | MECANISMO DE CARGA                     |
| LNM      | MECANISMO DE LENTE                     |
| PFM      | MECANISMO DE ALIMENTACIÓN DEL PAPEL    |
| PIN      | RODILLO/PALANCA DE APRIETE             |
| PRI      | BLOQUE DE IMPRESOR                     |
| RFM      | MECANISMO DE ALIMENTACIÓN DE LA CINTA  |
| RHD      | CABEZAS ROTATIVAS                      |
| SLD      | MECANISMO DE SEGUIMIENTO               |
| SRS      | SECCIÓN DEL CARRETE DE SUMINISTRO      |
| STA      | BLOQUE ESTÁTICO                        |
| TDM      | MECANISMO DE ACCIONAMIENTO DE LA CINTA |
| THR      | MECANISMO DE ENHEBRADO                 |
| TNR      | REGULADOR DE LA TENSIÓN DE LA CINTA    |
| TPT      | CAMINO DE LA CINTA                     |
| TRS      | SECCIÓN DEL CARRETE DE RECOGIDA        |
| WIR      | CABLE                                  |
| XXX      | PIEZAS ESTÉTICAS                       |

| CÓDIGOS DE LOS DEFECTOS |                                                     |
|-------------------------|-----------------------------------------------------|
| MECÁNICO                |                                                     |
| A                       | GASTADO (O DEFECTO MECÁNICO EN GENERAL)             |
| A1                      | ERROR DE FUNCIONAMIENTO                             |
| B                       | ENSUCIADO/MANCHADO                                  |
| C                       | DESAJUSTADO MECÁNICAMENTE                           |
| D                       | CORTADO/DEFECTUOSO                                  |
| E                       | DESFORMADO                                          |
| F                       | ENGANCHADO/BLOQUEADO                                |
| G                       | RAYADO/ABOLLADO/BORDES CORTANTES                    |
| H                       | HENDIDURA/PELADO/CORROIDO/FUNDIDO                   |
| I                       | SEPARADO/SUELTO/RAYADO                              |
| J                       | INESTABILIDAD                                       |
| K                       | PÉRDIDA (MECÁNICA)                                  |
| L                       | SECO (SIN LUBRIFICANTE)                             |
| M                       | CUERPO EXTRAÑO                                      |
| ELÉCTRICO               |                                                     |
| N                       | COMPONENTE ELÉCTRICO/MÓDULO DEFECTUOSO              |
| O                       | QUEMADO/FORMACIÓN DE ARCO/PIXELS QUE FALTAN         |
| P                       | MAL AJUSTADO ELÉCTRICAMENTE/MAL AJUSTADO            |
| Q                       | CORTOCIRCUITO                                       |
| R                       | CIRCUITO ABIERTO                                    |
| S                       | FUGA (ELÉCTRICA)                                    |
| T                       | MAL CONTACTO/SOLDADURA                              |
| T1                      | MALA CONEXIÓN A TIERRA                              |
| U                       | CIRCUITO ABIERTO                                    |
| V                       | PLACA HENDIDA                                       |
| W                       | SOLDADURA SECA O QUE FALTA                          |
| X                       | SOLDADURA EN PUENTE                                 |
| Y                       | MÓDULO/COMPONENTE EQUIVOCADO                        |
| Z                       | MÓDULO/COMPONENTE PERDIDO                           |
| 1                       | PROBLEMA DE SOFTWARE                                |
| 11                      | PÉRDIDA DE DATO DESDE LA MEMORIA                    |
| 12                      | FALLO EN AJUSTE/INSTALACIÓN DE PROGRAMA             |
| 13                      | SOFTWARE DEFECTUOSO O INCOMPLETO                    |
| 14                      | PROBLEMA DE AJUSTE DEL SOFTWARE                     |
| 15                      | NO IDENTIFICA/VERIFICA EL PRODUCTO O EL USUARIO     |
| 2                       | AGOTADO/EMISIÓN DÉBIL                               |
| 3                       | NO SE ENCUENTRA PROBLEMA (APARATO DENTRO DE ESPEC.) |
| 4                       | NO SE ENCUENTRA PROBLEMA - EQUIVOCACIÓN DEL USUARIO |
| 5                       | NO SE ENCUENTRA PROBLEMA - CONDICIONES LOCALES      |
| 51                      | FALLO EN LA TENSIÓN PRINCIPAL                       |
| 6                       | IMPOSIBLE DIAGNOSTICAR FALLO                        |
| 7                       | INCORRECTAMENTE CABLEADO/MONTADO                    |
| 81                      | CONEXIÓN INCORRECTA DEL EQUIPO                      |
| 9                       | MAL USO POR EL USUARIO                              |
| 93                      | MODIFICACIÓN NO AUTORIZADA                          |

| CÓDIGOS DE REPARACIÓN |                                                      |
|-----------------------|------------------------------------------------------|
| A                     | SUBSTITUCIÓN                                         |
| B                     | AJUSTE MECÁNICO                                      |
| C                     | AJUSTE ELÉCTRICO                                     |
| D                     | RESOLDADURA                                          |
| D1                    | REPARACIÓN/RECOLOCAR EN SU SITIO (CONECTOR/TUBO/...) |
| E                     | LIMPIEZA                                             |
| F                     | ENGRASE                                              |
| G                     | COMPONENTES ELÉCTRICOS REPARADOS                     |
| H                     | COMPONENTES MECÁNICOS REPARADOS                      |
| I                     | MODIFICACIÓN SOLICITADA POR EL FABRICANTE            |
| J                     | DESMONTADO                                           |
| K                     | AÑADIDO                                              |
| L                     | COMPROBACIÓN FUNCIONAL                               |
| M                     | MEDICIÓN DE ESPECIFICACIÓN                           |
| N                     | MANTENIMIENTO                                        |
| O                     | REPULIR                                              |
| P                     | SUBSTITUCIÓN PREVENTIVA DE COMPONENTES               |
| Q                     | ACCIÓN PREVENTIVA SIN SUBSTITUCIÓN DE COMPONENTES    |
| U                     | EXPLICACIÓN AÑADIDA                                  |
| V                     | PRESUPUESTO RECHAZADO                                |
| W                     | PRESUPUESTO CON COMPONENTES                          |
| X                     | PRESUPUESTO SIN COMPONENTES                          |
| Y                     | VUELTO AL CLIENTE SIN REPARACIÓN                     |
| Z                     | CAMBIO DEL APARATO                                   |
| Z1                    | CAMBIO DE PRODUCTO (REPARACIÓN MUY CARA)             |
| Z2                    | CAMBIO DE PRODUCTO (MUCHAS VISITAS/REPARACIONES)     |
| Z3                    | CAMBIO DE PRODUCTO (REPUESTO NO OBTENIBLE)           |
| Z4                    | CAMBIO DE PRODUCTO (IMPOSIBLE DE REPARAR)            |
| Z5                    | CAMBIO DE PRODUCTO (SOLICITADO AL DETALLISTA)        |
| Z6                    | CAMBIO DE PRODUCTO (SOLICITADO POR EL FABRICANTE)    |
| 1                     | CORRECCIÓN DEL SOFTWARE/REAJUSTE                     |
| 2                     | ACTUALIZACIÓN DEL SOFTWARE                           |
| 3                     | PRODUCTO ACTUALIZADO (SOBRE PEDIDO)                  |

| BANDEROLA | CÓDIGO DE SÍNTOMA  | CÓDIGO DE REPUESTO                                                 | NÚMERO DE REFERENCIA         | SECCIÓN | PLACA         | CÓDIGO DE DEFECTO | CÓDIGO DE REPARACIÓN | CANTIDAD |
|-----------|--------------------|--------------------------------------------------------------------|------------------------------|---------|---------------|-------------------|----------------------|----------|
| 1         | 1 4 1 2<br>3 6 4 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1<br>3 4 5 6 7 8 9 X X X X X X X X X | R 1 2 3 . . .<br>1 1 1 . . . | T D M   | Y A 2 2 . . . | C 1               | Z 1                  | . .      |

# TECHNICAL INFORMATION

**Chassis concerned : ICC17 (25"MP & 28"MP)**

**Symptom/ Problem observed :**

Spare Parts List, component part number amendment.

**Solution implemented :**

To optimize the CRT heater supply voltage for the above mentioned tubes, both LL05(DST) and LB02 (coil) have been changed.

**LL05** : Old Part No. 10546610 ---> **New Part No. 10600190**

**LB02** : Old Part No. 10477930 ---> **New Part No. 25349470**

**Comment :**

Both components must be replaced at the same time.

# TECHNICAL INFORMATION

**Finished products / Chassis concerned :**  
**All TV sets equipped with ICC17 chassis (CRT Board)**

**Subject : Protection of transistor TB02 against arcing**

**Symptom/ Problem observed :**

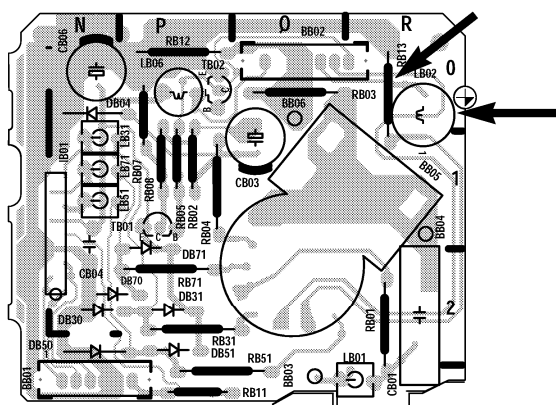
Transistor type number BF422 used in position TB02 found defective.

**Cause :**

Arcing.

**Solution implemented :**

- Remove the resistor at location RB13.
- On the copper side of the CRT PCB, add an insulated wire link between pin 1 of inductor LB02 and pin 4 of the CRT socket (ground).



IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

| Condition/<br>Symptom | Part No | Qty | Position | Section | Fault<br>Code | Repair<br>Code |
|-----------------------|---------|-----|----------|---------|---------------|----------------|
| 1 3 1 5               |         |     | R B 1 3  | V P A   | Y             | T              |

You do not need to write anything in the white boxes.

# TECHNICAL INFORMATION

## Chassis concerned : ICC17

### Symptom/ Problem observed :

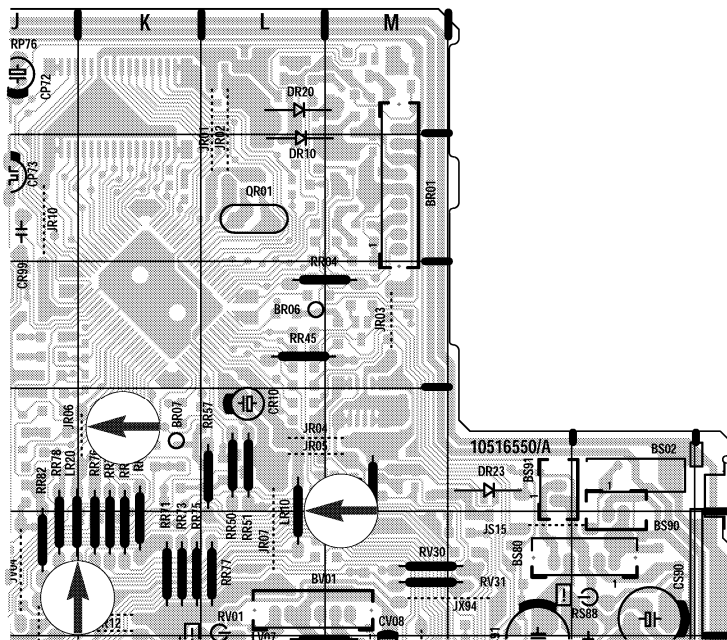
Moiré patterning visible on some channels.

### Cause :

High frequency cross modulation.

### Solution implemented

- Remove the jumper link at location JR06.
- Remove the inductor at location LR20.
- Replace LR10 10 $\mu$ H inductor with a jumper link.



# TECHNICAL INFORMATION

## Chassis concerned : ICC17

### Problem observed :

Different symptoms can be observed

- TV stuck in the Standby Mode with the safety mode active (code 27).
- Unstable OSD graphics.
- Sporadic or intermittent vertical scan.

### Cause :

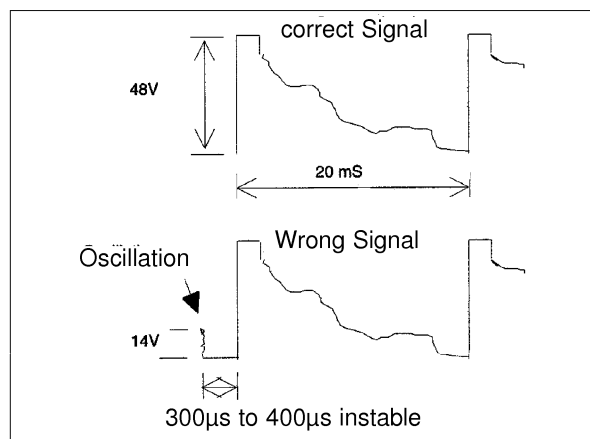
Parasitic oscillation at pin 7 of IF01 (see attached)

### Solution implemented :

The problem is still under investigation to identify the basic cause of the problem, but to initially overcome the problem we recommend changing the following components:

- Change RF08 from  $4.7\Omega$  or  $27\Omega$  to  $68\Omega \pm 5\%$  0.700w Part No. 15009050.
- Change CF08 from 100nF to 220nF 20% 63V Part No. 43302770.

If problem is still not resolved after changing the above mentioned resistors the replace IF01.



IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

| Condition/<br>Symptom | Part No         | Qty | Position | Section | Fault<br>Code | Repair<br>Code |
|-----------------------|-----------------|-----|----------|---------|---------------|----------------|
| 1 1 1 9               | 1 5 0 0 9 0 5 0 | 0 1 | R F 0 8  | D F L   | Y             | A              |
|                       | 4 3 3 0 2 7 7 0 | 0 1 | C F 0 8  | D F L   | Y             | A              |

You do not need to write anything in the white boxes.





# TECHNICAL INFORMATION

**Chassis concerned : ICC17 (with PCB index 02)**

**Problem observed :**

The TV will not come out the Standby Mode.

**Cause :**

When starting, the base drive current to TP50 is too low.

**Solution implemented :**

Change the diode in position DP39 (LL4148) to a resistor strap Part No. 41047950.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

| Condition/<br>Symptom | Part No  | Qty | Position | Section | Fault<br>Code | Repair<br>Code |
|-----------------------|----------|-----|----------|---------|---------------|----------------|
| 1119                  | 41047950 | 01  | DP39     | PSU     | Y             | A              |

You do not need to write anything in the white boxes.

# TECHNICAL INFORMATION

## Chassis concerned : ICC17

### Problem observed :

At switch "ON", the TV's standby power supply does not work.

### Cause :

The reverse voltage of the diodes used in positions DP16/17/18/19 (1N4001) is too low especially when the mains voltage is at highest.

### Solution implemented :

Change the diodes used in positions DP16/17/18/19 with higher reverse breakdown voltage (400V) type number 1N4004, Part No. 44009009.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

| Condition/<br>Symptom | Part No             | Qty           | Position        | Section        | Fault<br>Code | Repair<br>Code |
|-----------------------|---------------------|---------------|-----------------|----------------|---------------|----------------|
| <div>1119</div>       | <div>44009009</div> | <div>01</div> | <div>DP16</div> | <div>PSU</div> | <div>Y</div>  | <div>A</div>   |
| <div></div>           | <div>44009009</div> | <div>01</div> | <div>DP17</div> | <div>PSU</div> | <div>Y</div>  | <div>A</div>   |
| <div></div>           | <div>44009009</div> | <div>01</div> | <div>DP18</div> | <div>PSU</div> | <div>Y</div>  | <div>A</div>   |
| <div></div>           | <div>44009009</div> | <div>01</div> | <div>DP19</div> | <div>PSU</div> | <div>Y</div>  | <div>A</div>   |

You do not need to write anything in the white boxes.

# TECHNICAL INFORMATION

**Chassis concerned : ICC17 (with PCB index 02)**

**Problem observed : .**

East/West correction circuit failure.

**Cause :**

The transistor used in position TL41 (BD241C) is damaged due to CRT flashover.

**Solution implemented :**

After replacement TL41, add a RGP10G protection diode in position DL41 in parallel with TL41 (cathode to the collector of TL41 and the anode to ground), Part No. 10459090.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

| Condition/<br>Symptom | Part No  | Qty | Position | Section | Fault<br>Code | Repair<br>Code |
|-----------------------|----------|-----|----------|---------|---------------|----------------|
| 3335                  | 10459090 | 01  | DL41     | DFL     | Z             | K              |

You do not need to write anything in the white boxes.

# TECHNICAL INFORMATION

**Chassis concerned : ICC17**

**Subject : Improvement of the reception with internal antenna**

**Problem observed :**

Moiré patterning, mainly visible on VHF channels.

**Cause:**

Inference being caused by the switch mode power supplies when using a set top aerial.

**Solution implemented :**

Change the value of capacitor CP49 from 1.5nF into 3.3nF 20% 1.6KV code 10607950.

Please change the following components in order to change the frequency of operation of the power as follows :

- Capacitor CP16/CP17 from 220nF to a 470nF 20% 275V Part No. 10596570.
- Capacitor CP41 from 10nF 63V to a 10nF 10% 100V Part No. 70427750.
- Resistor RP53 from 5.6k $\Omega$  to a 5.1k $\Omega$  5% 0.100W Part No. 30611700.
- Resistor RP56 from 10k $\Omega$  to a 2.2k $\Omega$  5% 0.100W Part No. 40077900.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

| Condition/<br>Symptom | Part No         | Qty | Position | Section | Fault<br>Code | Repair<br>Code |
|-----------------------|-----------------|-----|----------|---------|---------------|----------------|
| 1 2 2 4               | 1 0 6 0 7 9 5 0 | 0 1 | C P 4 9  | P S U   | Y             | A              |
|                       | 1 0 5 9 6 5 7 0 | 0 1 | C P 1 6  | P S U   | Y             | A              |
|                       | 1 0 5 9 6 5 7 0 | 0 1 | C P 1 7  | P S U   | Y             | A              |
|                       | 7 0 4 2 7 7 5 0 | 0 1 | C P 4 1  | P S U   | Y             | A              |
|                       | 3 0 6 1 1 7 0 0 | 0 1 | R P 5 3  | P S U   | Y             | A              |
|                       | 4 0 0 7 7 9 0 0 | 0 1 | R P 5 6  | P S U   | Y             | A              |

You do not need to write anything in the white boxes.

# TECHNICAL INFORMATION

**Chassis concerned : ICC17**

**Problem observed :**

Visible flash over after quickly switch Off and On again.

**Solution implemented :**

Change the value of capacitor CI57 from 2.2μF to a 1μF 20% 100V, Part No. 256728.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

| Condition/<br>Symptom | Part No | Qty | Position | Section | Fault<br>Code | Repair<br>Code |
|-----------------------|---------|-----|----------|---------|---------------|----------------|
| 1321                  | 256728  | 01  | CI57     | APR     | Y             | A              |

You do not need to write anything in the white boxes.

## GENERAL INFORMATION

### METHODOLOGY

#### 1 - ON POWER-UP :

- Observe the behaviour of the two-coloured LED: note the various stages and compare them to the normal cycle.

By doing this, the time at which the problem arose and the part of the circuit which needs to be investigated can be identified.

#### 2 -TROUBLE SHOOTING PROCEDURE: LED BEHAVIOUR

In certain cases the LED will flash when transmitting a message:

LED flashing : message being transmitted.

Count the flashes : code is two bursts separated by a pause of 0.7 s and repeated several times.

See the error code table.



**LIST OF LED MESSAGE  
ERROR CODES**

This data is more precise than colour changes but still incomplete, since various causes may generate the same code.

#### 3 - FAULT FINDING :

Carryout of stages 1 and 2: an oscilloscope test may clarify the code transmitted in stage two.

##### **a - The television set operates fully or partially**

- Use LED message observation fault finding methods 1 and 2. See also the faults listed relating to fault finding by symptom.

##### **b - The television goes into permanent or cyclical security mode**

- Observe LED's behaviour (flashing red, stable orange followed by flashing, etc.).  
Select the relevant box in the column (LED behaviour fault finding).

**POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN**

(5) : standby

**Note :**  
During measurements in the power supply unit

- Use the primary power unit ground ( PGND ).

Attention :

Mesure dans le bloc alimentation  
- Utiliser la masse du bloc alimentation  
( PGND ).

Achtung :

Bei Messungen im Primärnetzteil  
- Primärnetzteilmasse verwenden  
( PGND ).

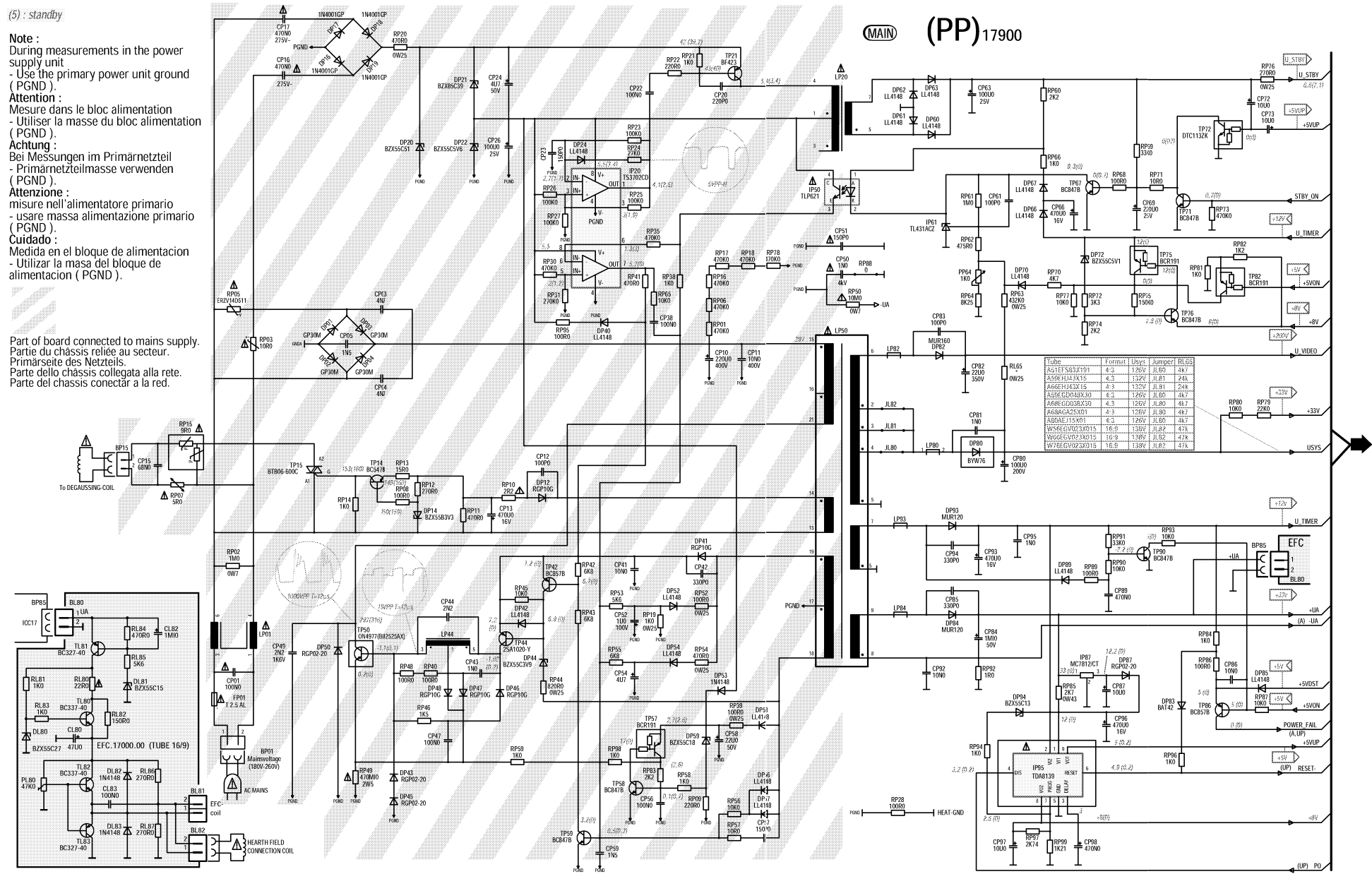
## Attenzione

misure nell'alimentatore primario  
- usare massa alimentazione primario  
( PGND ).

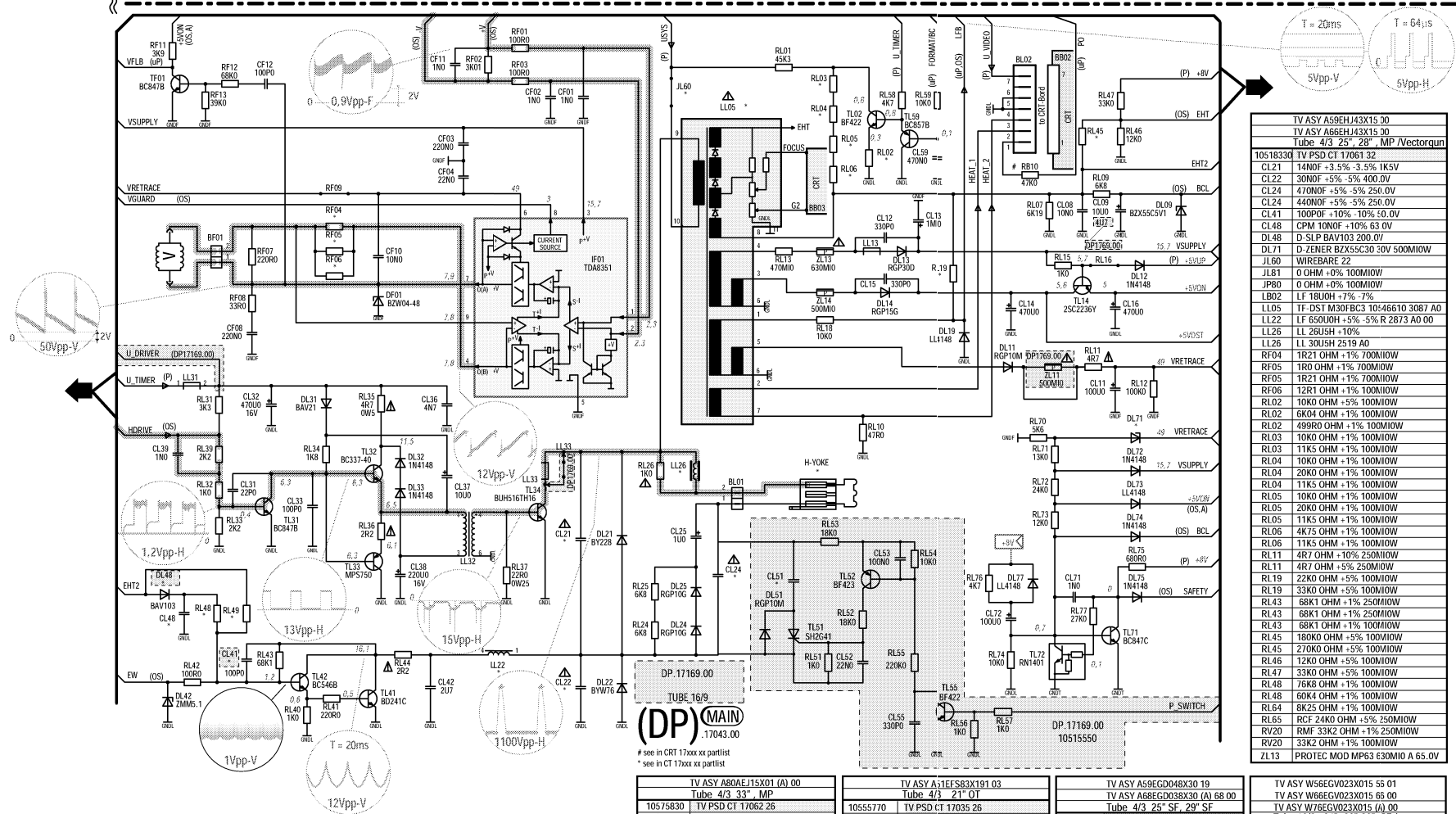
**Cuidado :**  
Medida en

Medida en el bloque de alimentacion  
- Utilizar la masa del bloque de alimentacion ( PGND ).

Part of board connected to mains supply.  
Partie du châssis reliée au secteur.  
Primärseite des Netzteils.  
Parte dello chassis collegata alla rete.  
Parte del chassis conectar a la red.



 Use isolating mains transformer - Utiliser un transformateur isolateur du secteur -Einen Trenntrafo verwenden  
Utilizar un transformador aislador de red - Utilizzare un trasformatore per isolarvi dalla rete



⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

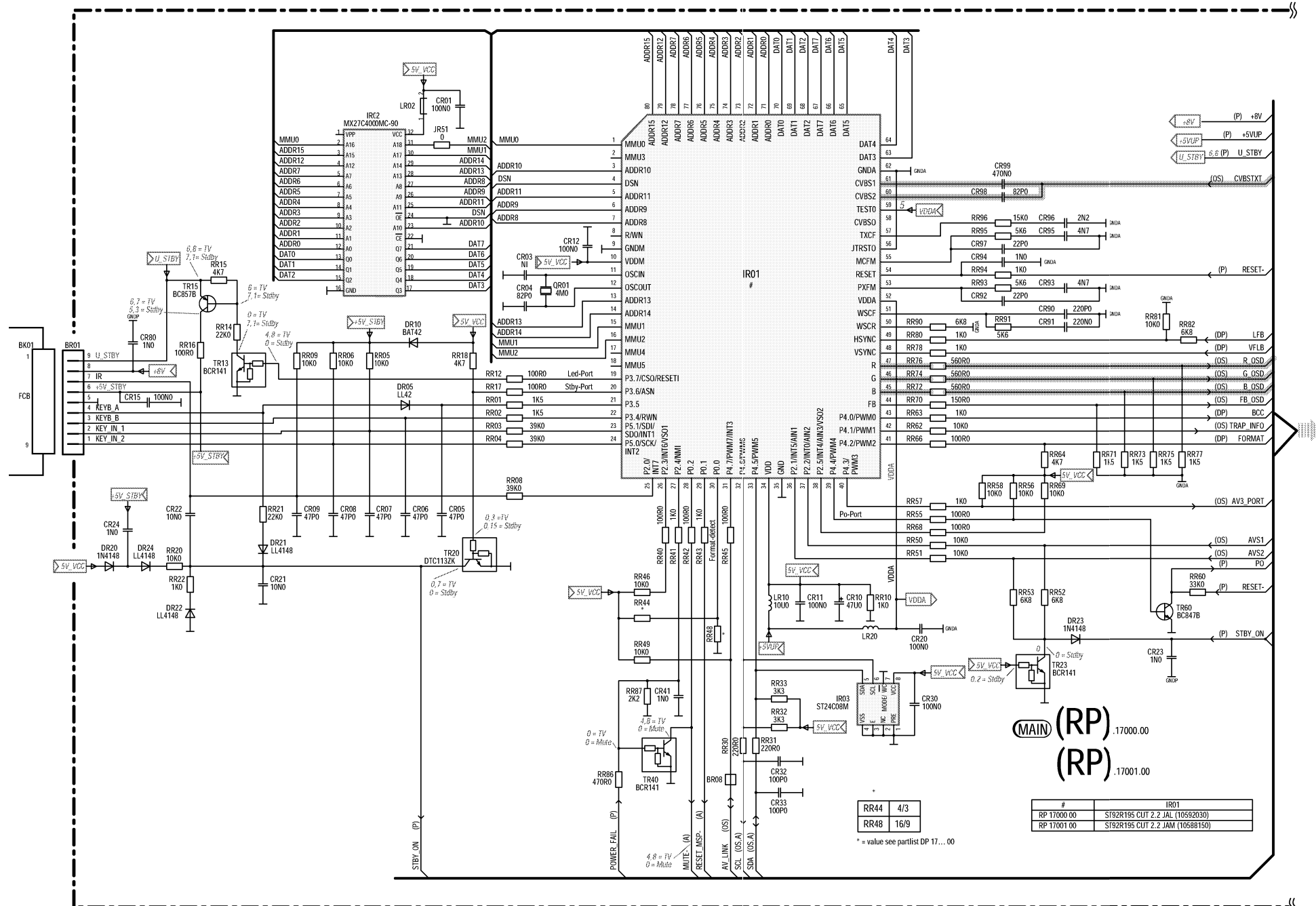
Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.  
Dans ce cas, la responsabilité du fabricant n'est plus engagée.

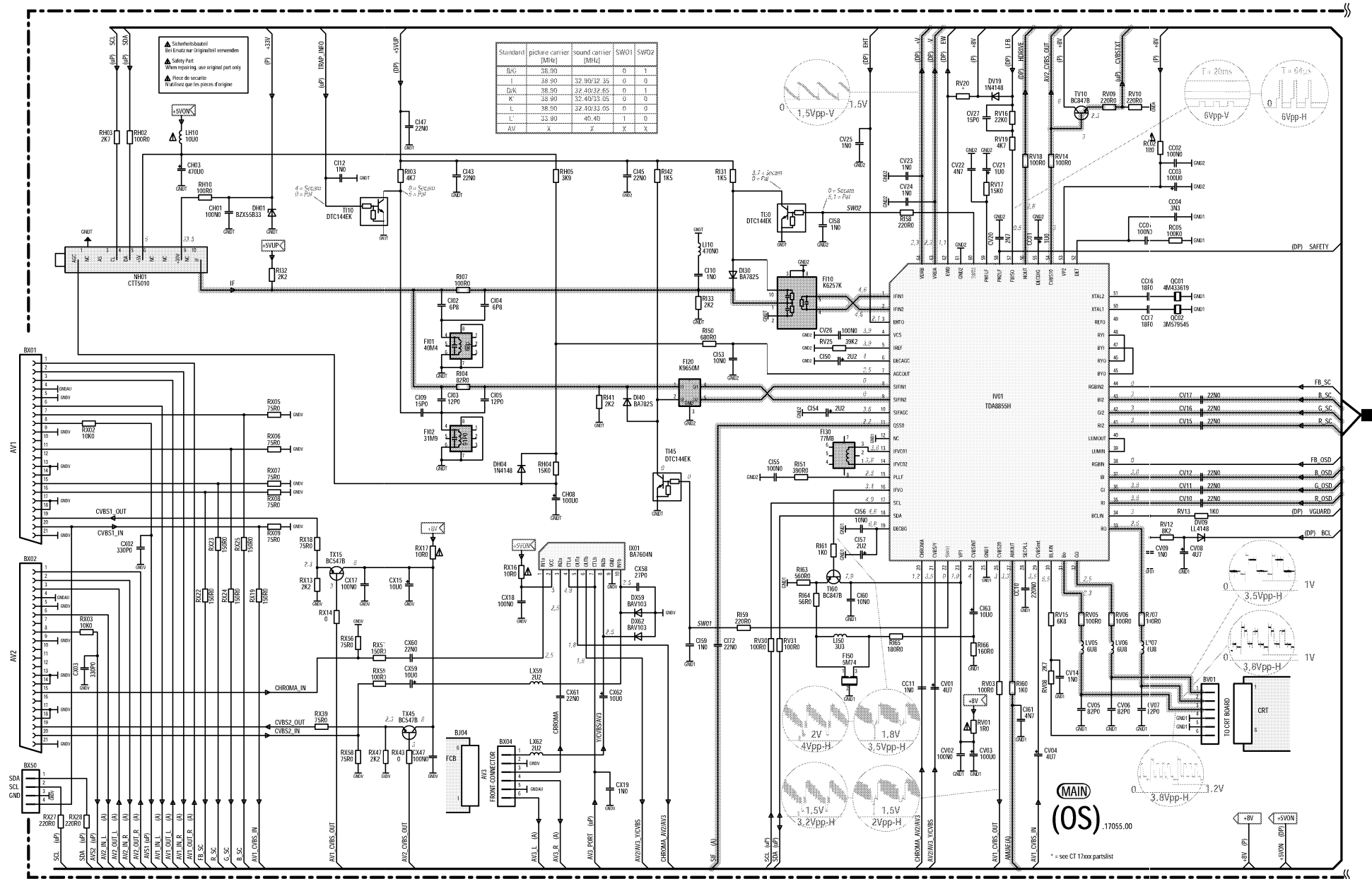
Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (contrassegnati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.  
In tal caso è "esclusa la responsabilità" del costruttore.

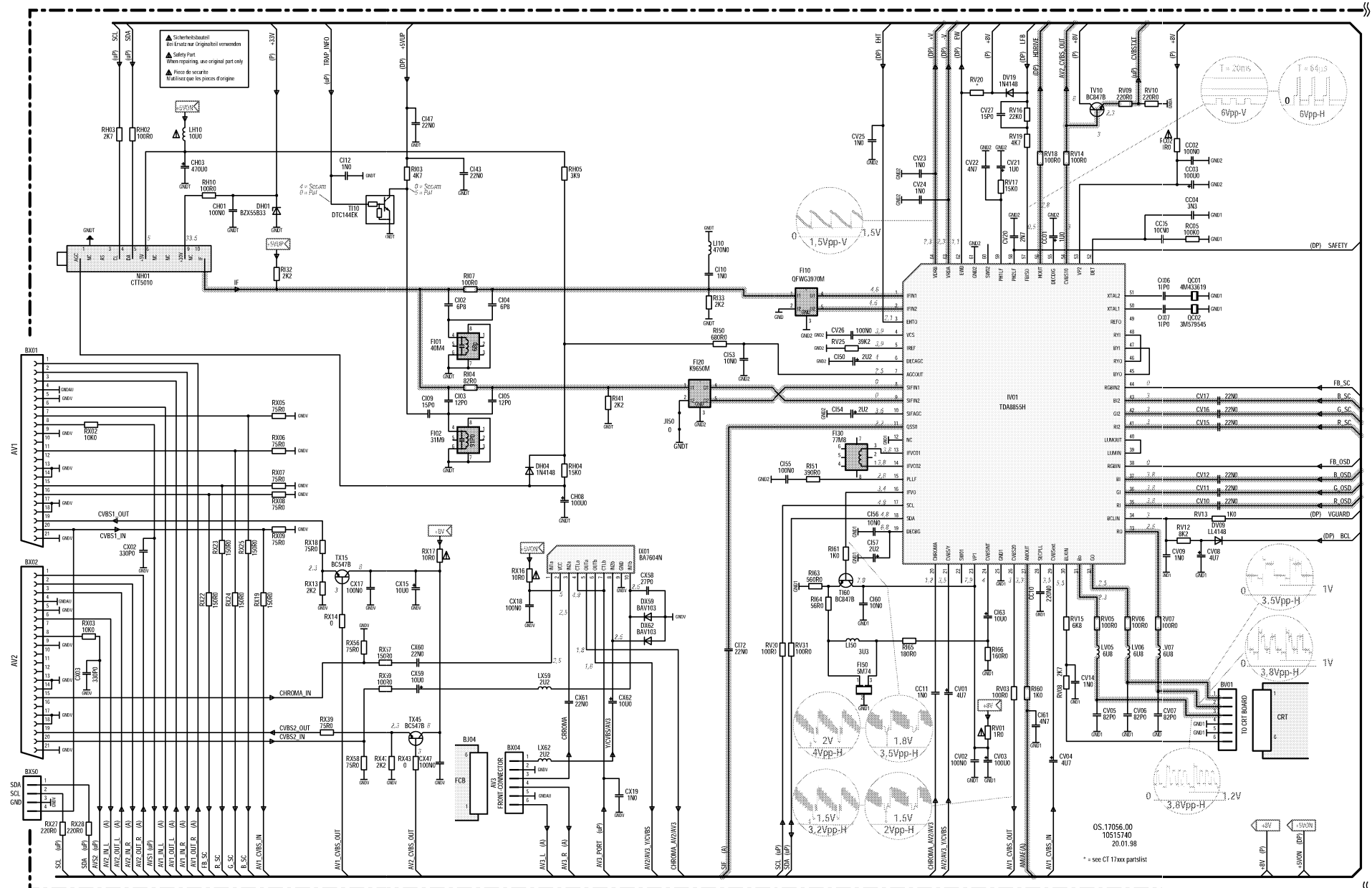
La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.  
En ese caso, el fabricante cesa de ser responsable.



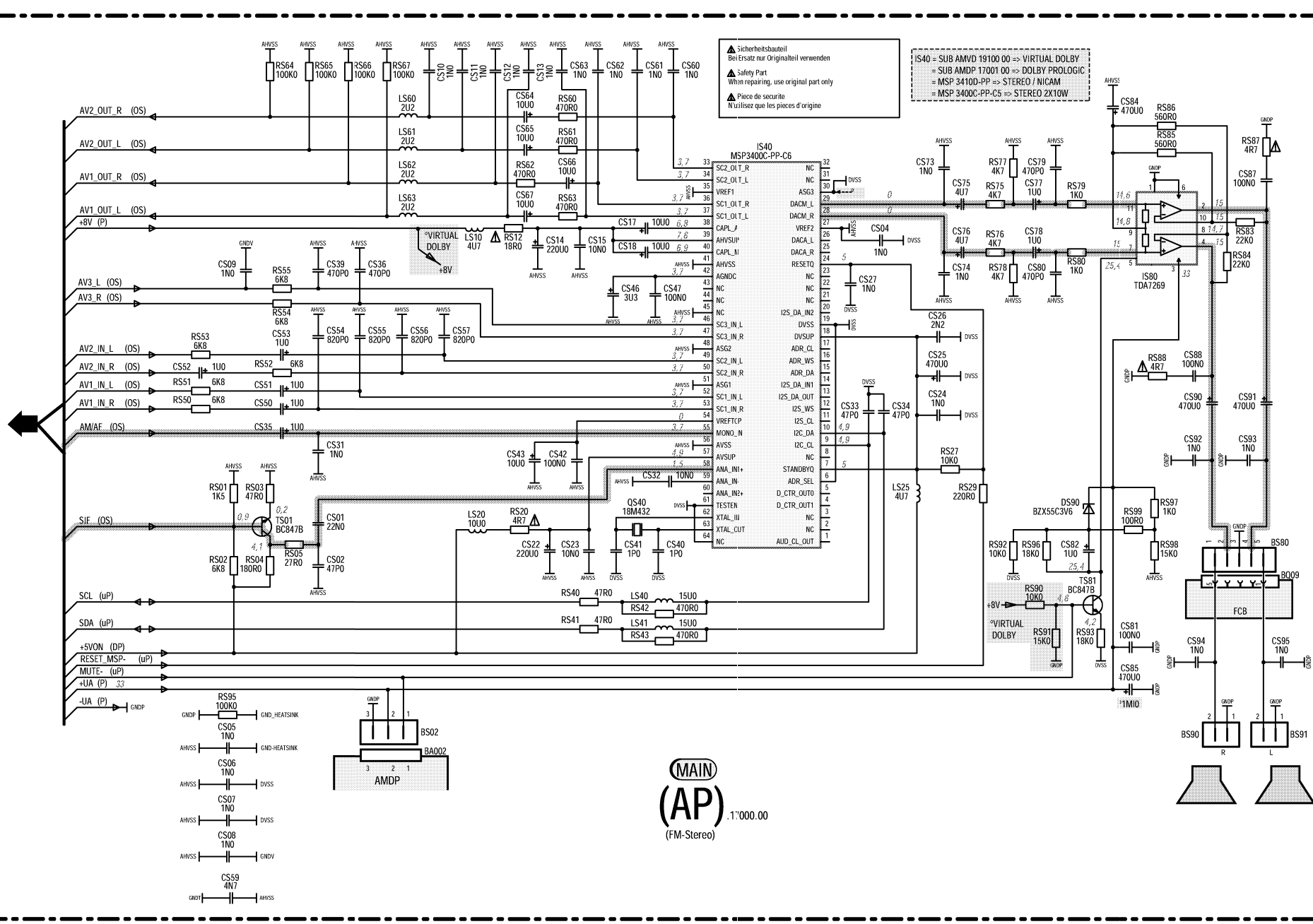




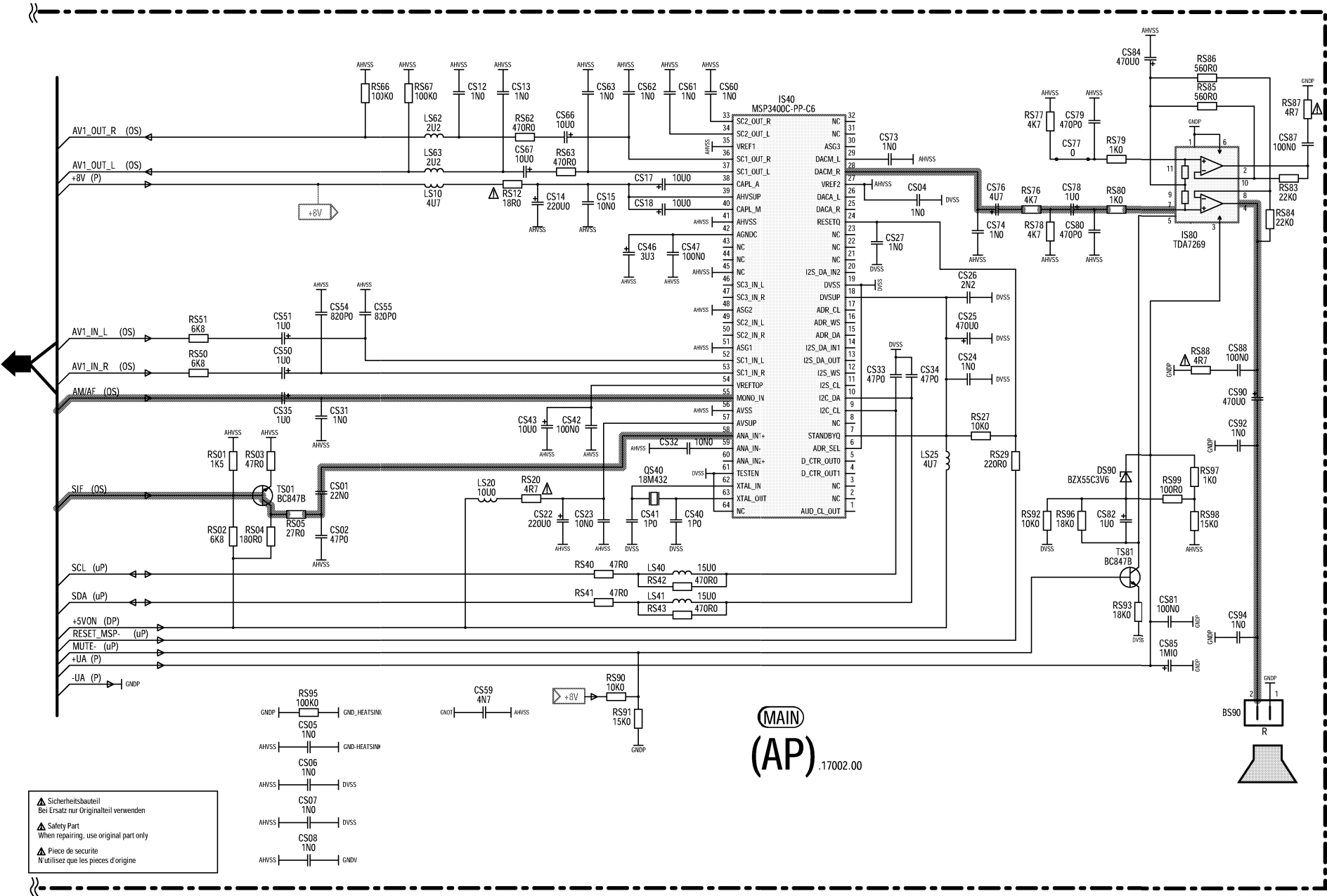
**RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO**



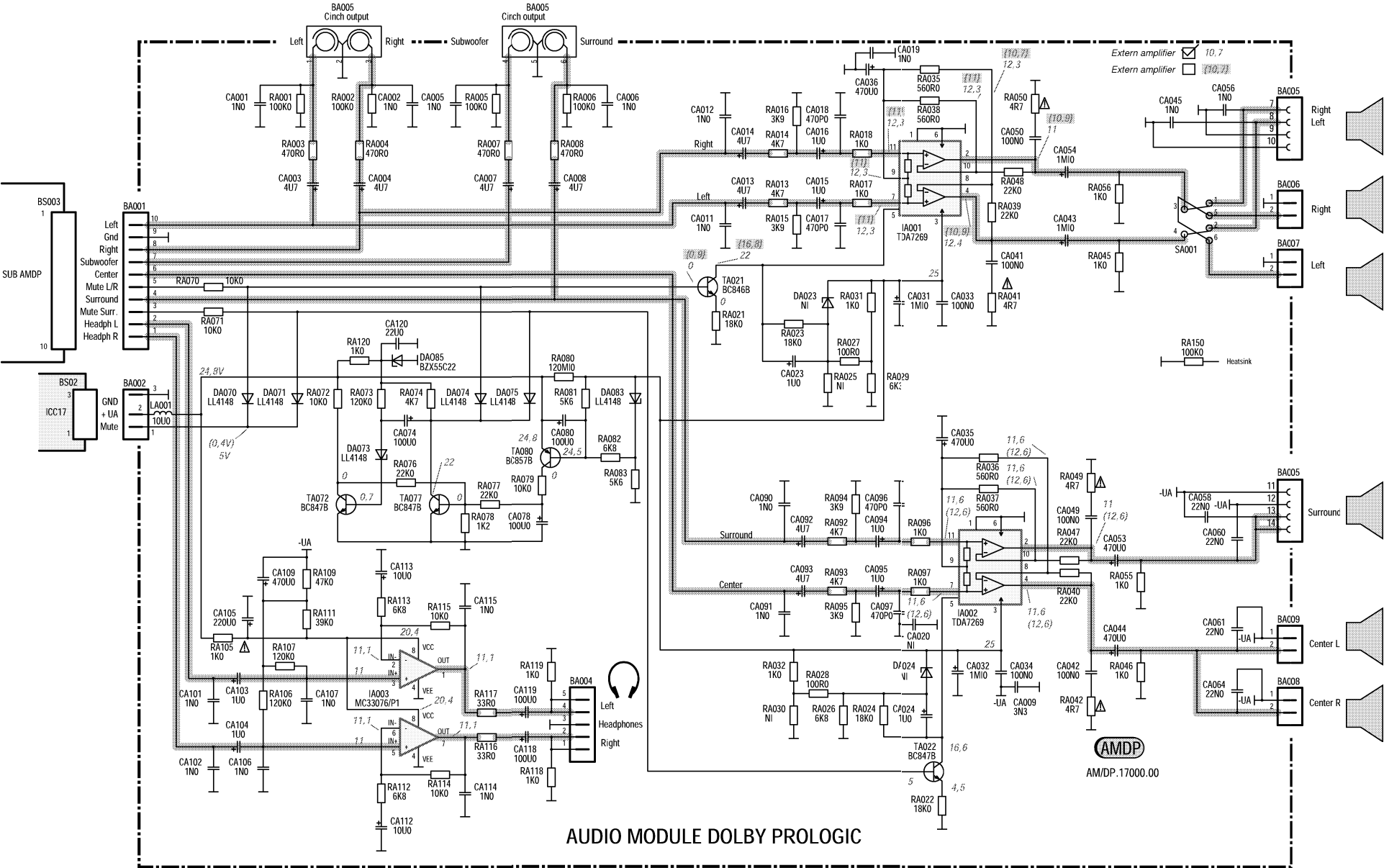
# AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE ESQUEMA DEL AMPLIFICADOR (STEREO)



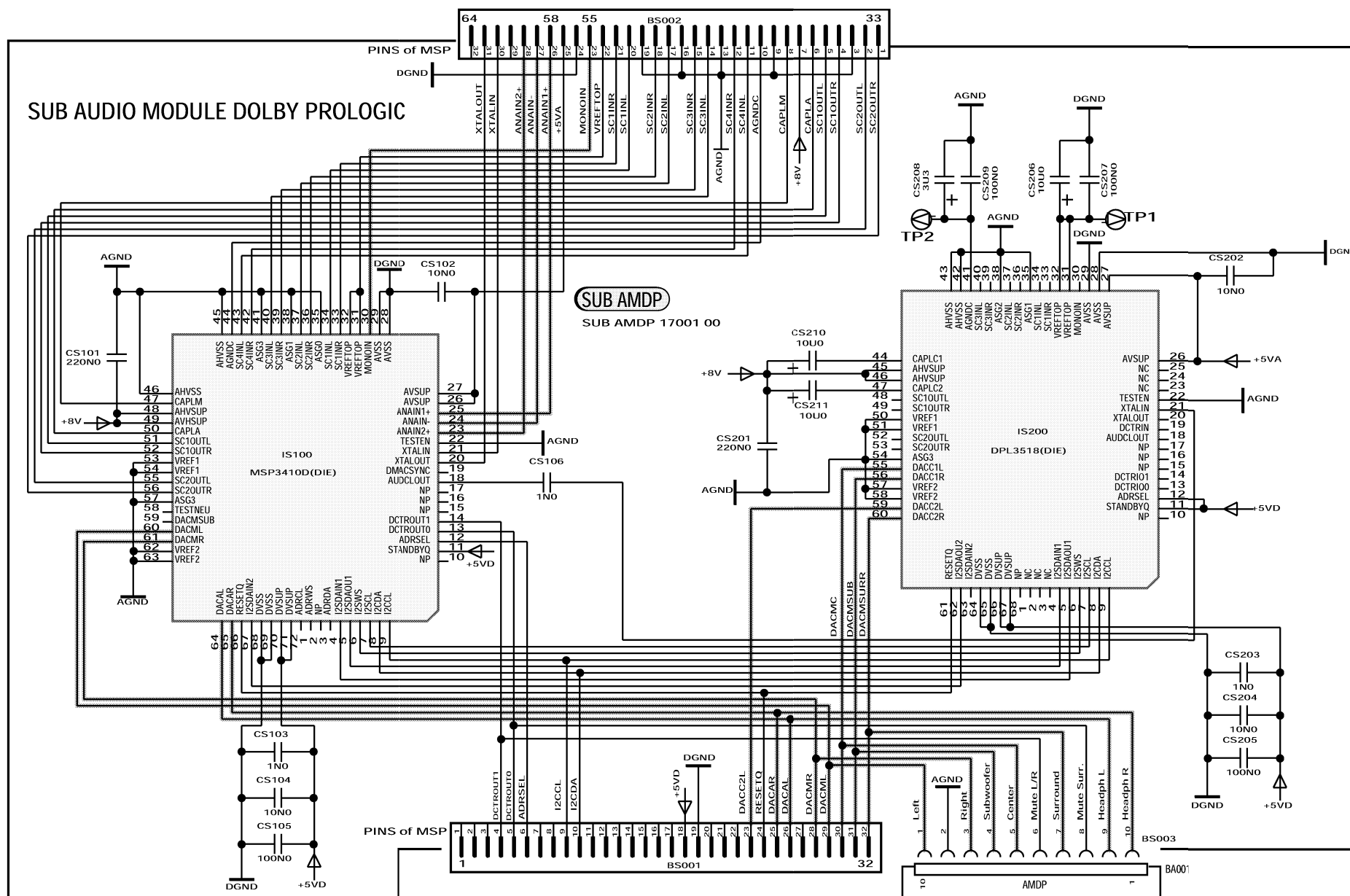
AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)



AUDIO SIGNAL MODULE DOLBY PROLOGIC - MODULE AUDIO DOLBY PROLOGIC - DOLBY PROLOGIC VERSTÄRKER - MÓDULO AUDIO DOLBY PROLOGIC  
ESQUEMA DEL MÓDULO AMPLIFICADOR DE AUDIO



**SUB AUDIO SIGNAL MODULE - SUB MODULE AUDIO - AUDIO SIGNAL SUBMODUL - SUB MODULO AUDIO**









**POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN**

(5) : standby

**Note :**  
During measurements in the power supply unit  
- Use the primary power unit ground ( PGND ).

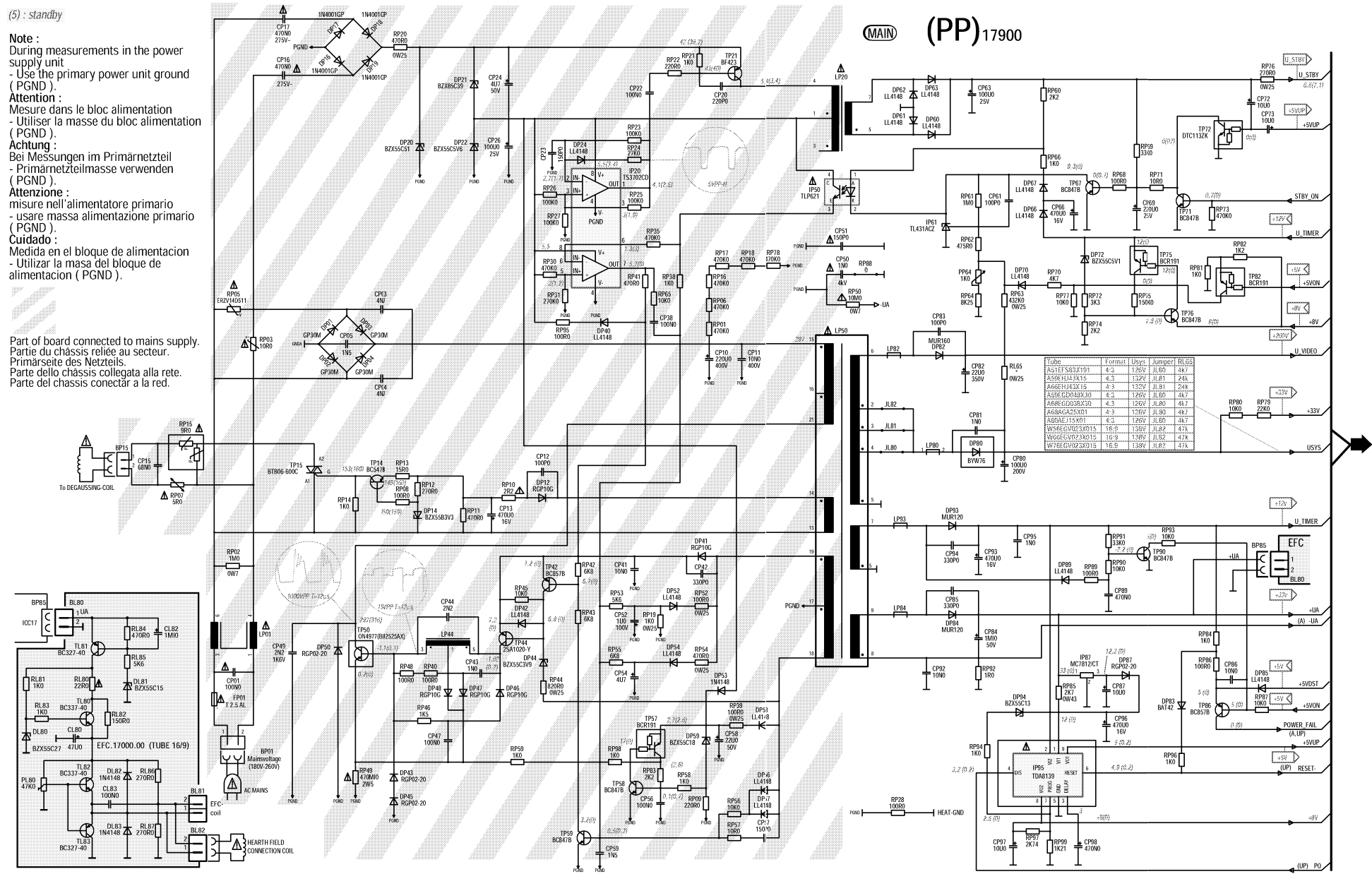
**Attention :**  
Mesure dans le bloc alimentation  
- Utiliser la masse du bloc alimentation  
( PGND ).

**Achtung:**  
Bei Messungen im Primärnetzteil  
- Primärnetzteilmasse verwenden  
( PGND ).

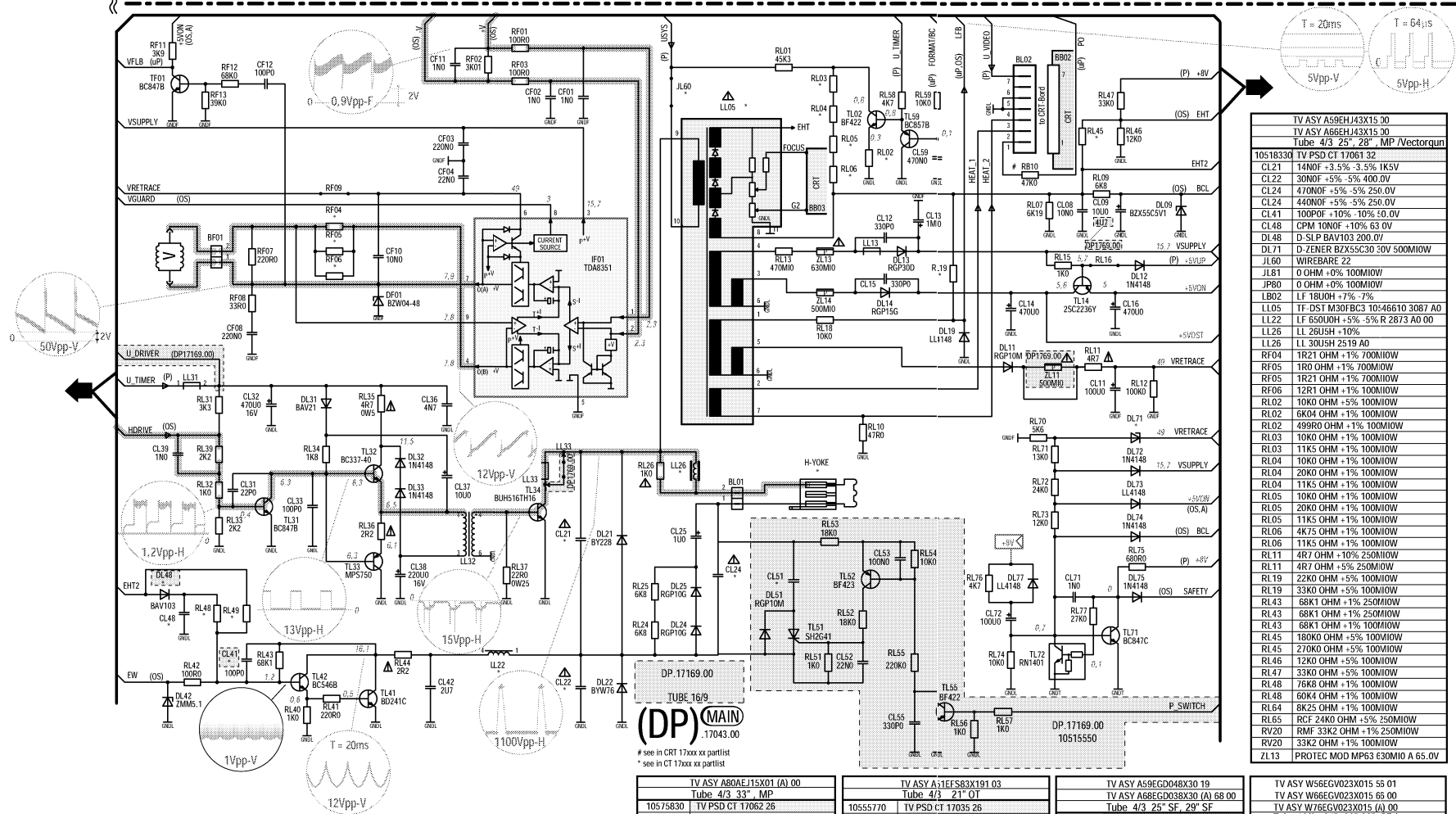
**Attenzione :**  
 misure nell'alimentatore primario  
 - usare massa alimentazione primario  
 ( PGND ).

**Cuidado :**  
Medida en el bloque de alimentacion  
- Utilizar la masa del bloque de alimentacion ( PGND ).

Part of board connected to mains supply.  
Partie du châssis reliée au secteur.  
Primärseite des Netzteils.  
Parte dello chassis collegata alla rete.  
Parte del chassis conectar a la red.



 Use isolating mains transformer - Utiliser un transformateur isolateur du secteur - Einen Trenntrafo verwenden  
Utilizar un transformador aislador de red - Utilizzare un trasformatore per isolarvi dalla rete



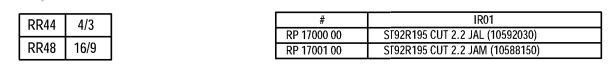
⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.  
Dans ce cas, la responsabilité du fabricant n'est plus engagée.

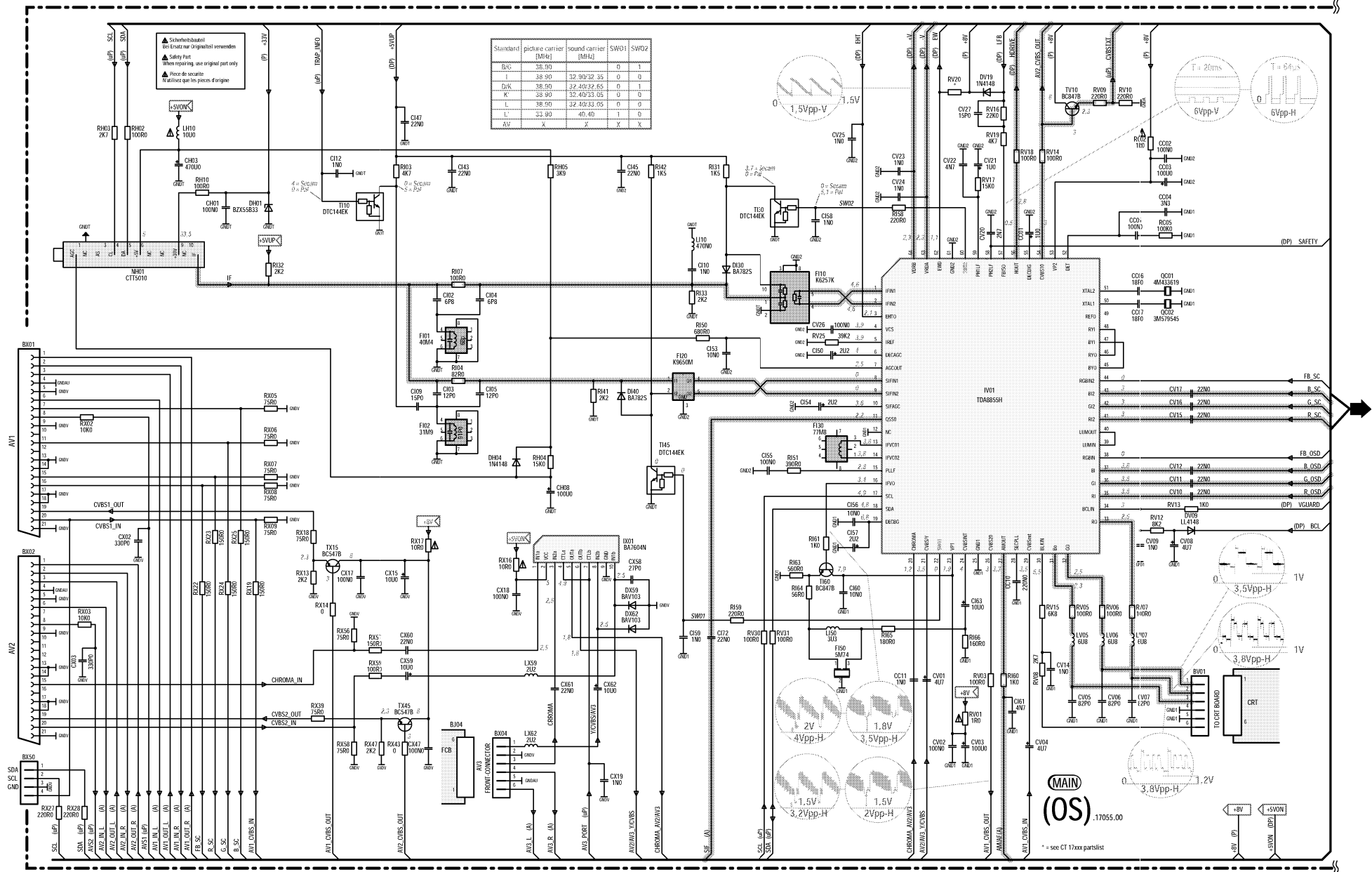
Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (contrassegnati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.  
In tal caso è "esclusa la responsabilità" del costruttore.

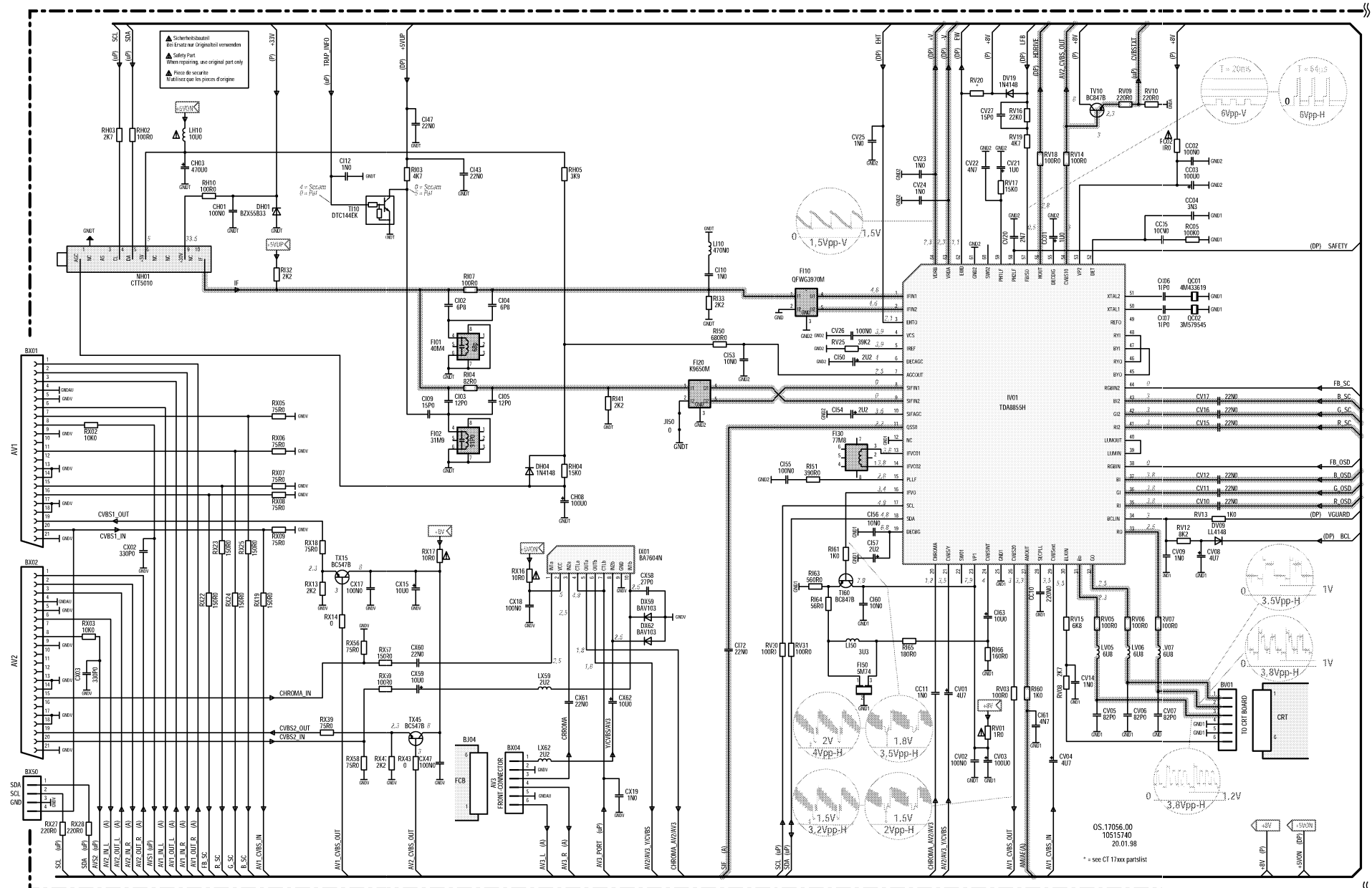
La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.  
En ese caso, el fabricante cesa de ser responsable.



RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO  
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR / TRATAMENTO VIDEO



RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRATTEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO



[illegible]



IS40  
MSP3400C-PP-C6

AV1\_OUT\_R (OS)  
AV1\_OUT\_L (OS)  
+8V (P)  
+8V  
AV1\_IN\_L (OS)  
AV1\_IN\_R (OS)  
AM/AF (OS)  
SIF (OS)  
SCL (uP)  
SDA (uP)  
+5VON (DP)  
RESET\_MSP- (uP)  
MUTE- (uP)  
+UA (P)  
-UA (P)  
GNDP

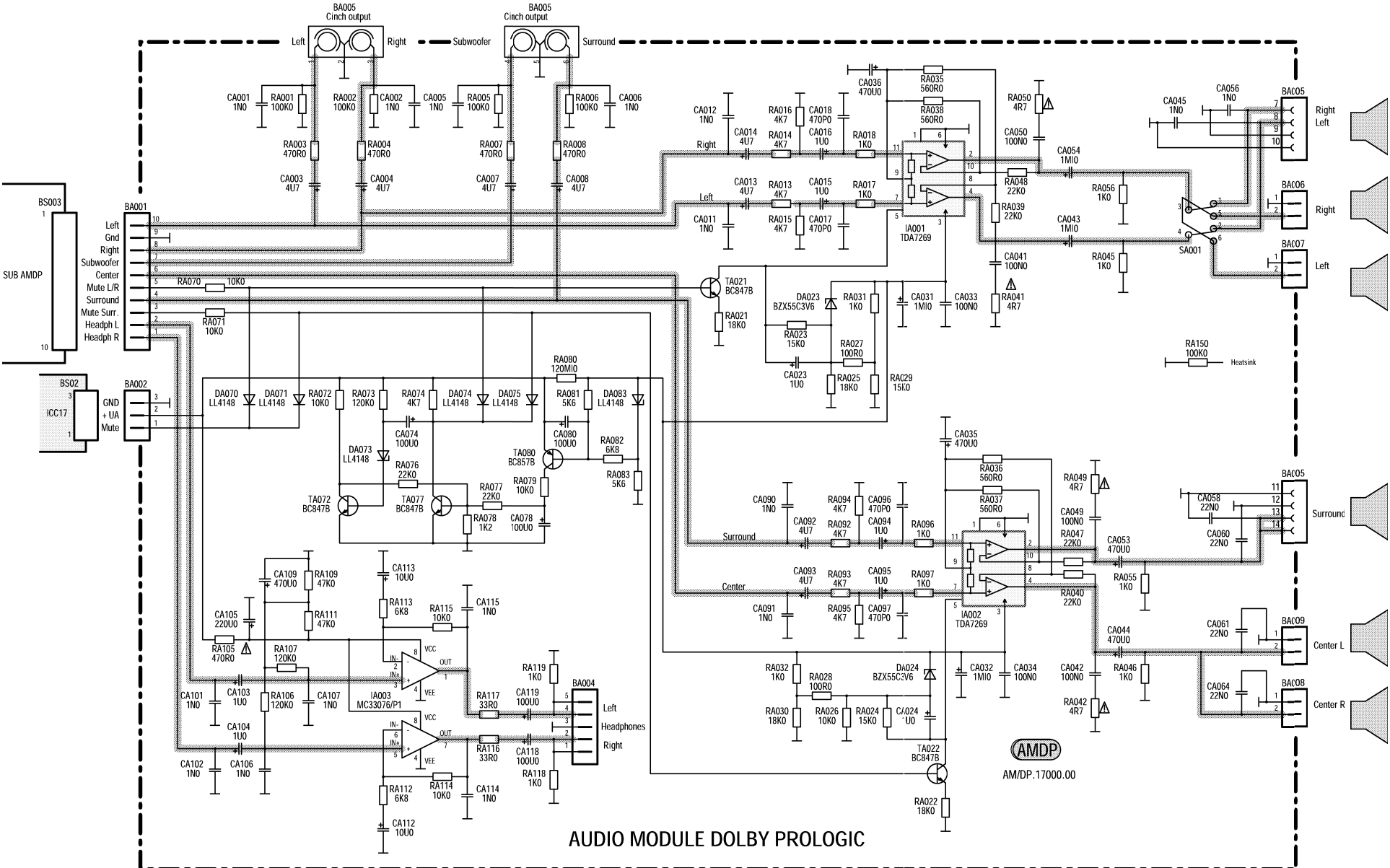
RS95 100K0  
CS05 1N0  
AHVSS  
CS06 1N0  
AHVSS  
CS07 1N0  
AHVSS  
CS08 1N0  
AHVSS  
GNDP

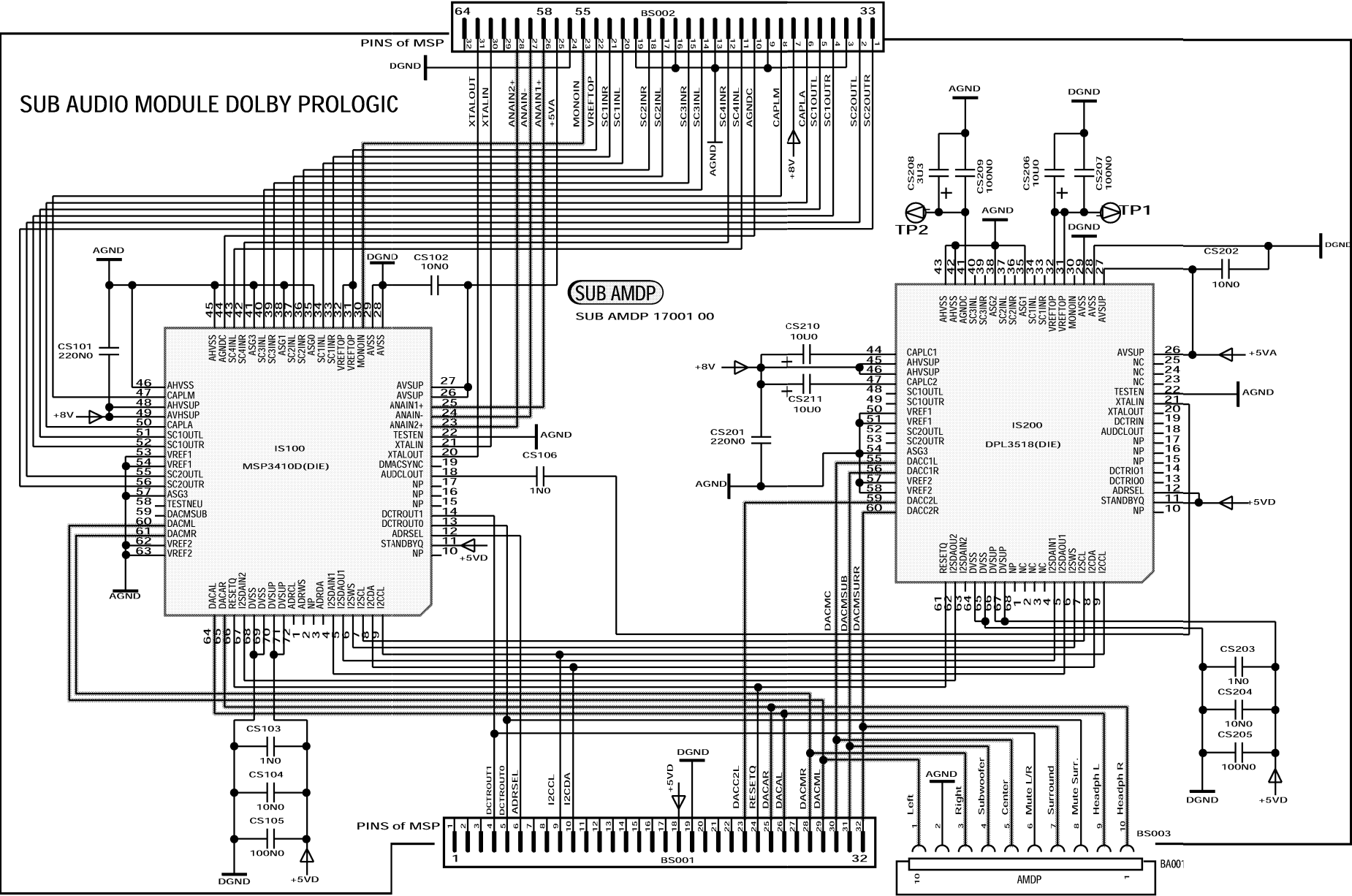
CS59 4N7  
AHVSS  
+8V  
RS90 10K0  
RS91 15K0  
GNDP

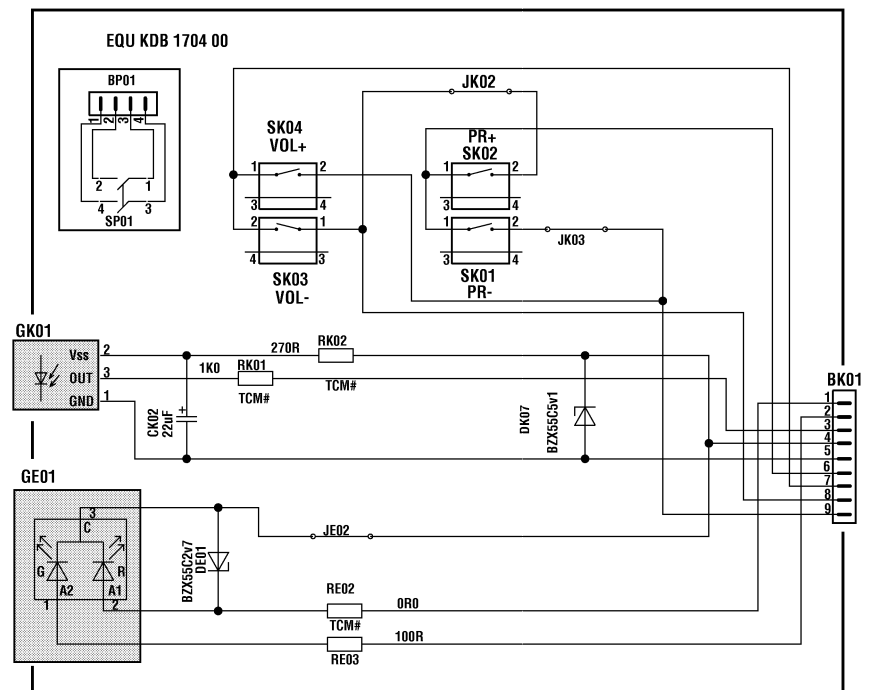
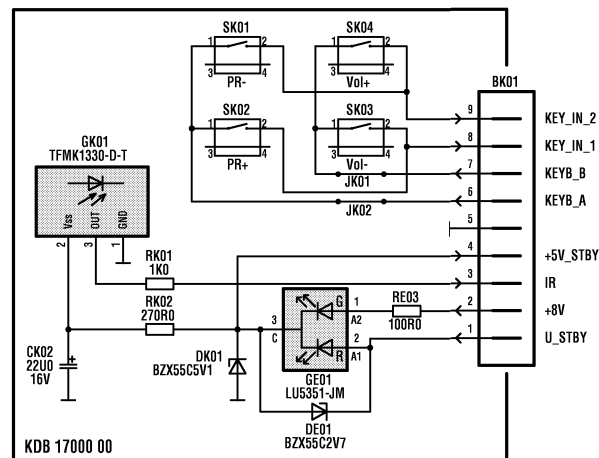
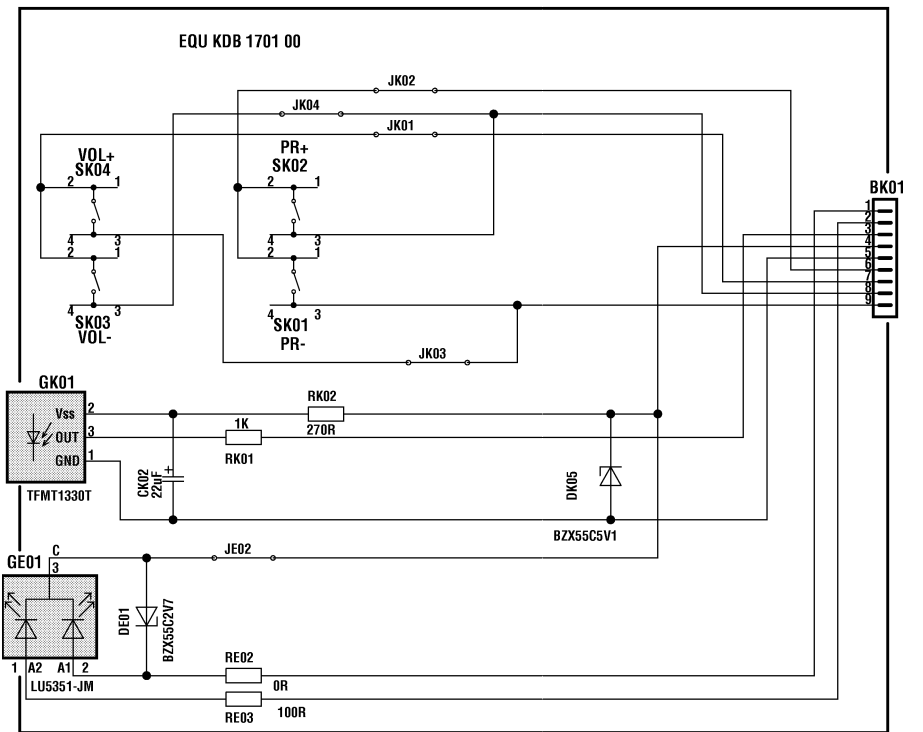
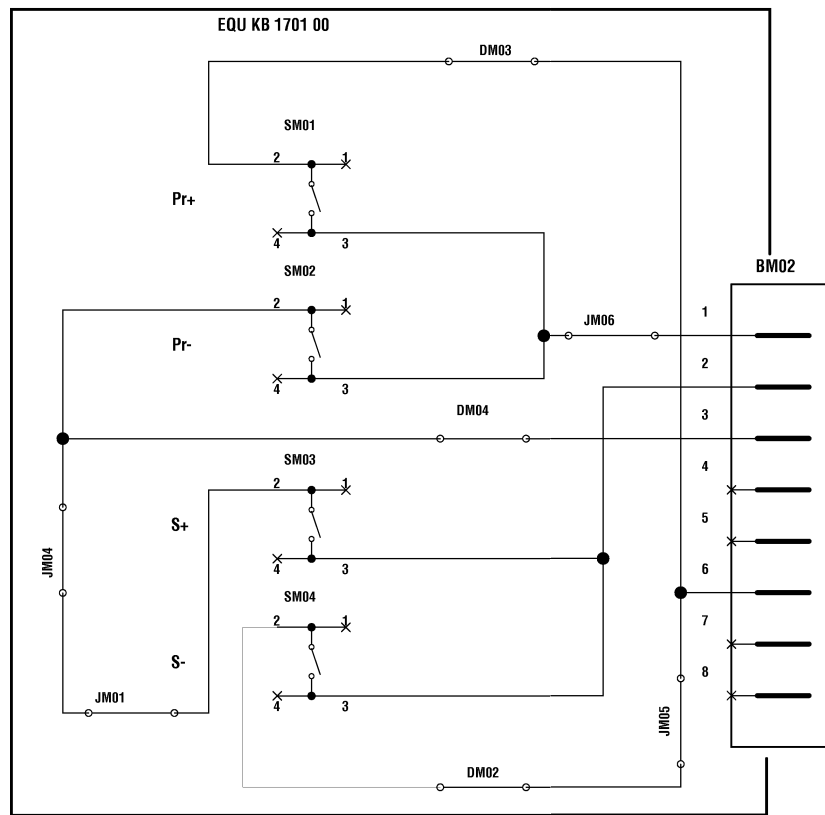
MAIN (AP) 17002.00

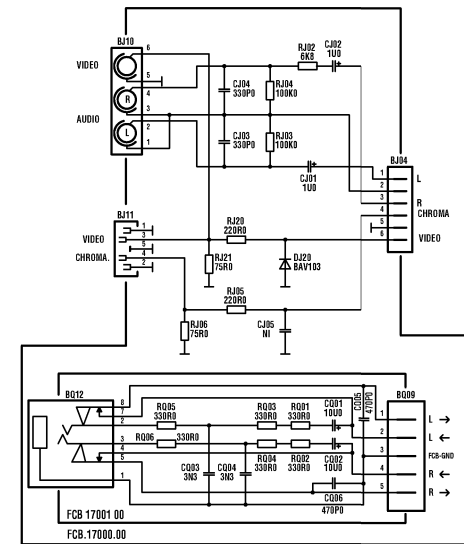
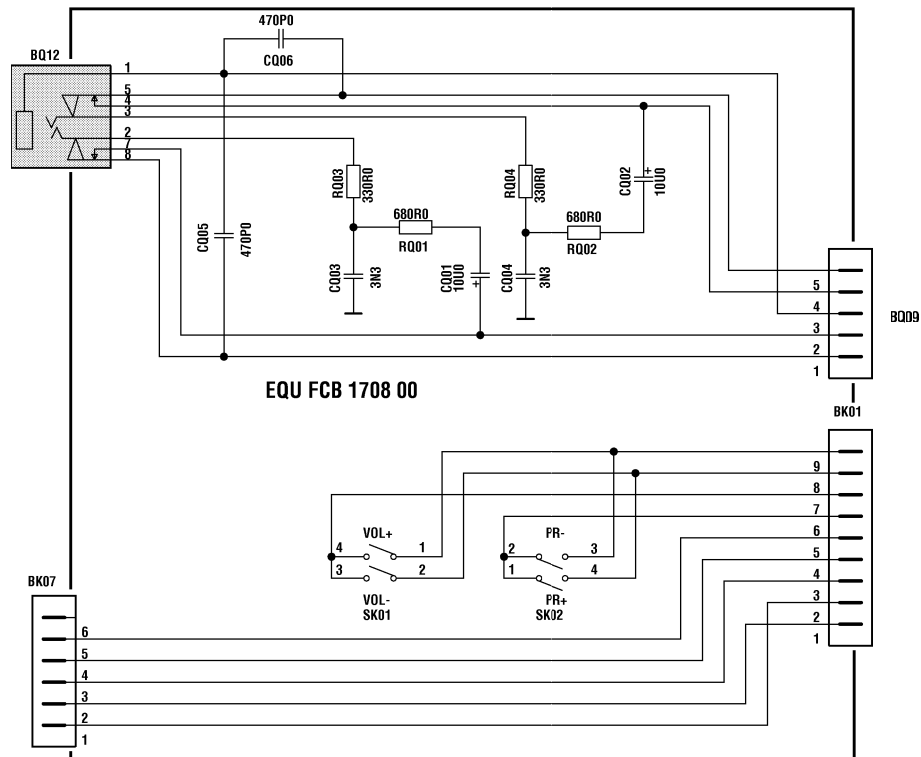
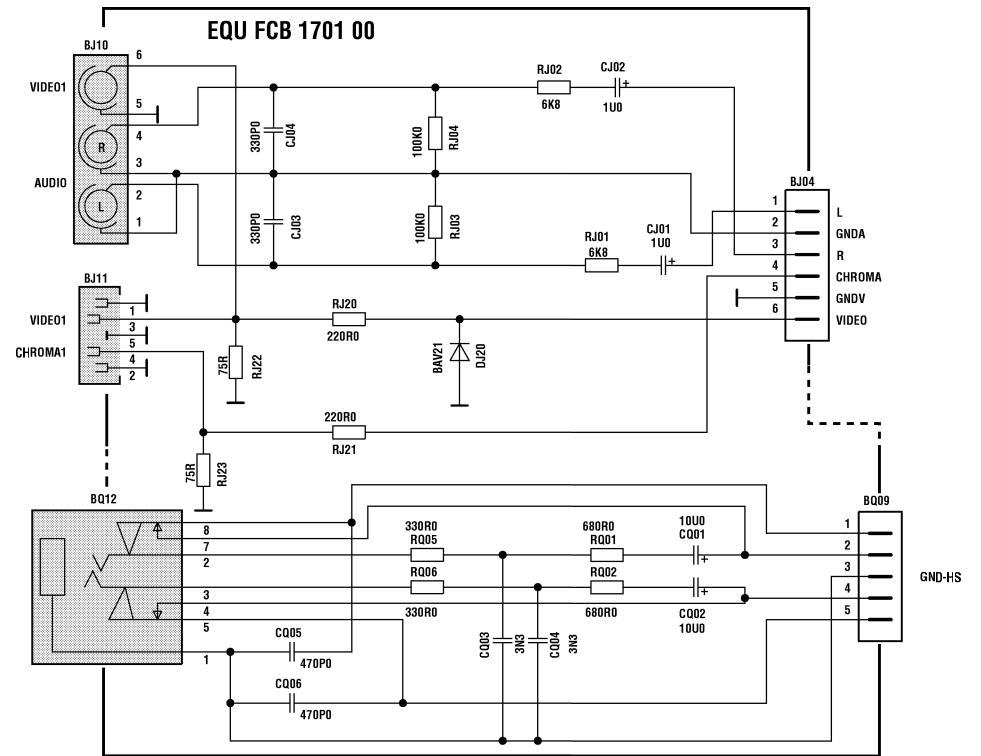
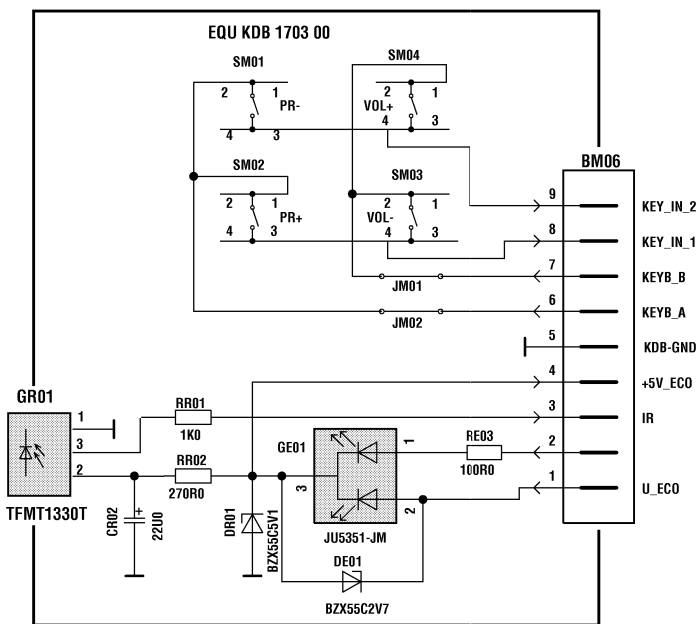


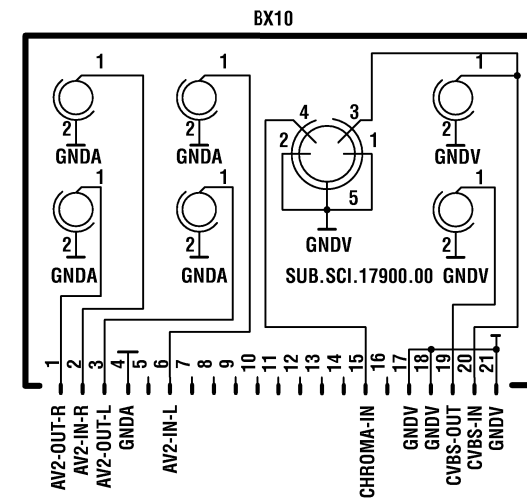
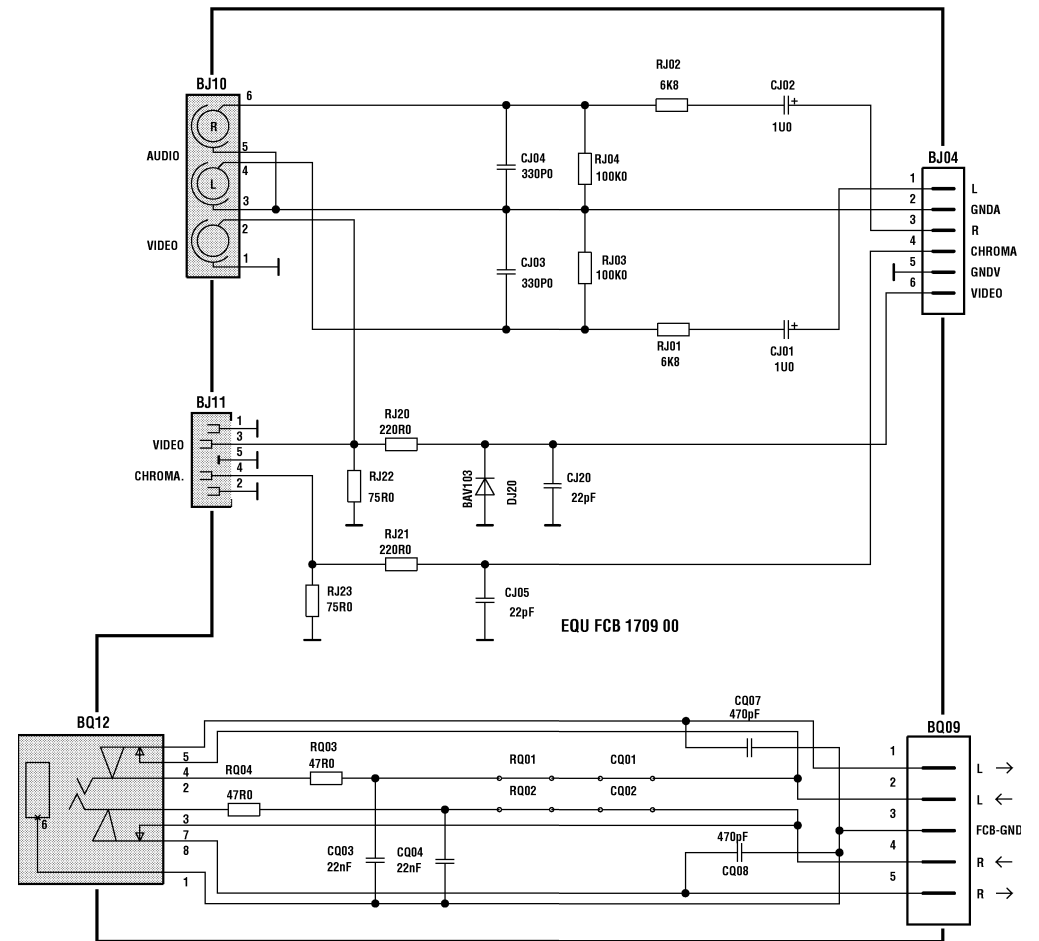
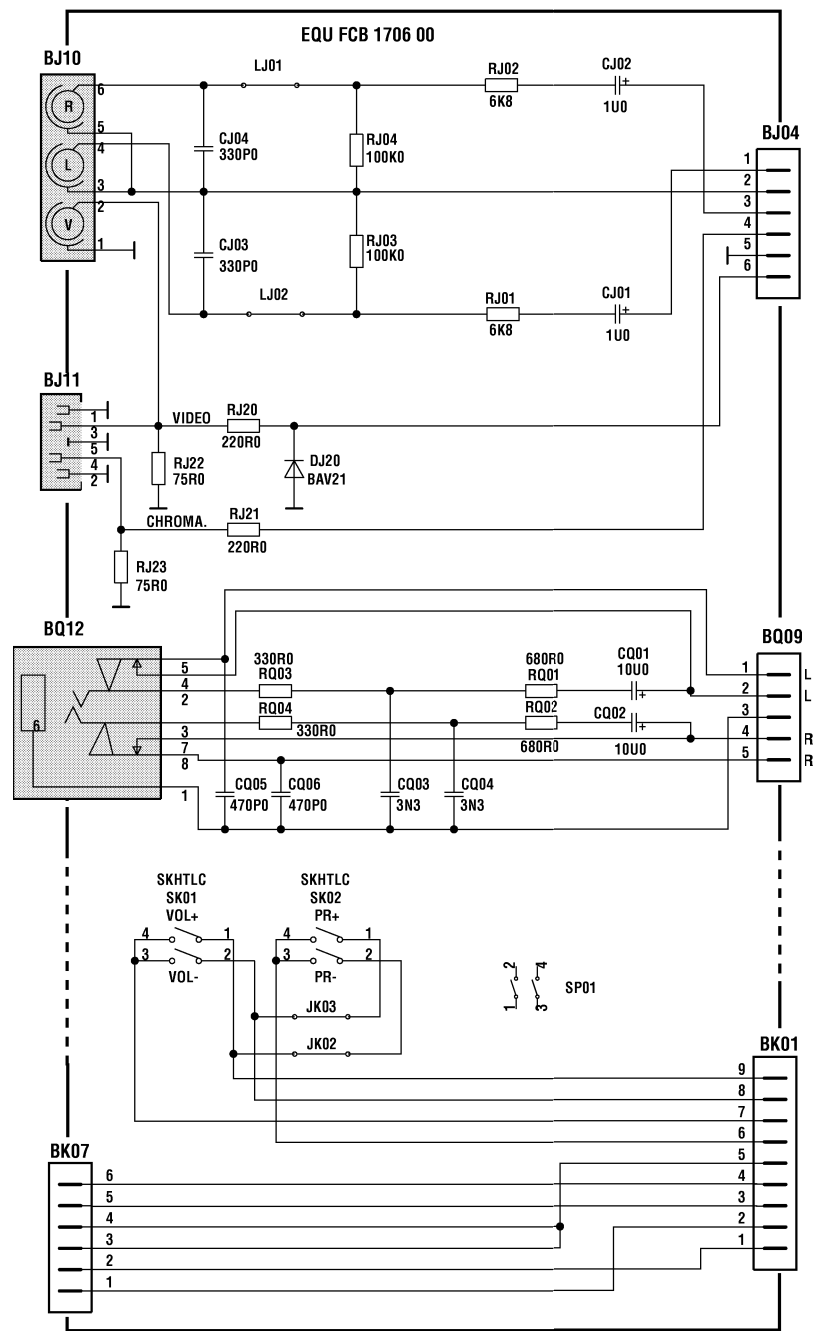
AUDIO SIGNAL MODULE DOLBY PROLOGIC - MODULE AUDIO DOLBY PROLOGIC - DOLBY PROLOGIC VERSTÄRKER - MODULO AUDIO DOLBY PROLOGIC  
ESQUEMA DEL MÓDULO AMPLIFICADOR DE AUDIO













**POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN**

(5) : standby

**Note :**  
During measurements in the power supply unit  
- Use the primary power unit ground ( PGND ).

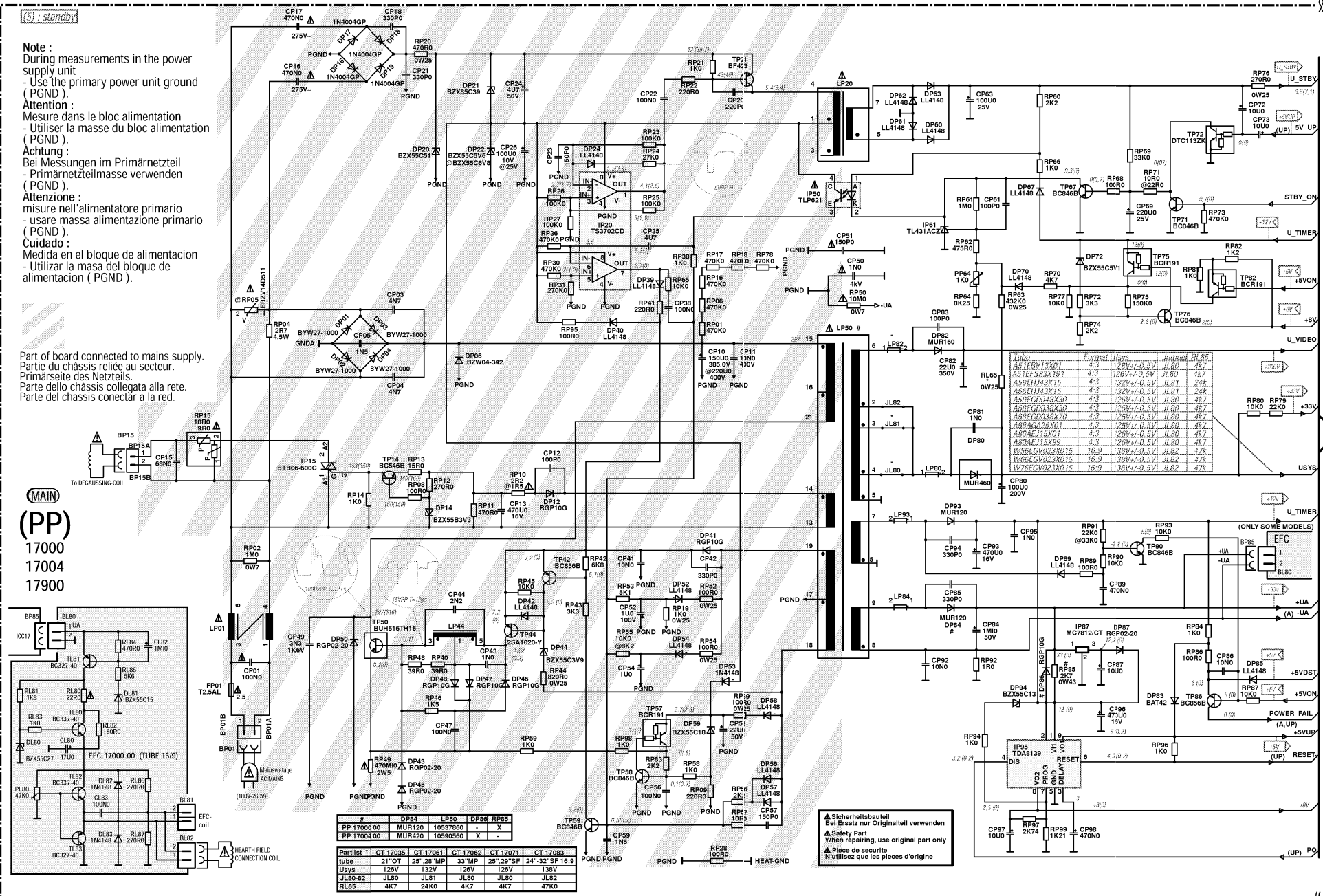
**Attention :**  
Mesure dans le bloc alimentation  
- Utiliser la masse du bloc alimentation  
( PGND ).

**Achtung:**  
Bei Messungen im Primärnetzteil  
- Primärnetzteilmasse verwenden  
( PGND ).

**Attenzione :**  
 misure nell'alimentatore primario  
 - usare massa alimentazione primario  
 ( PGND ).

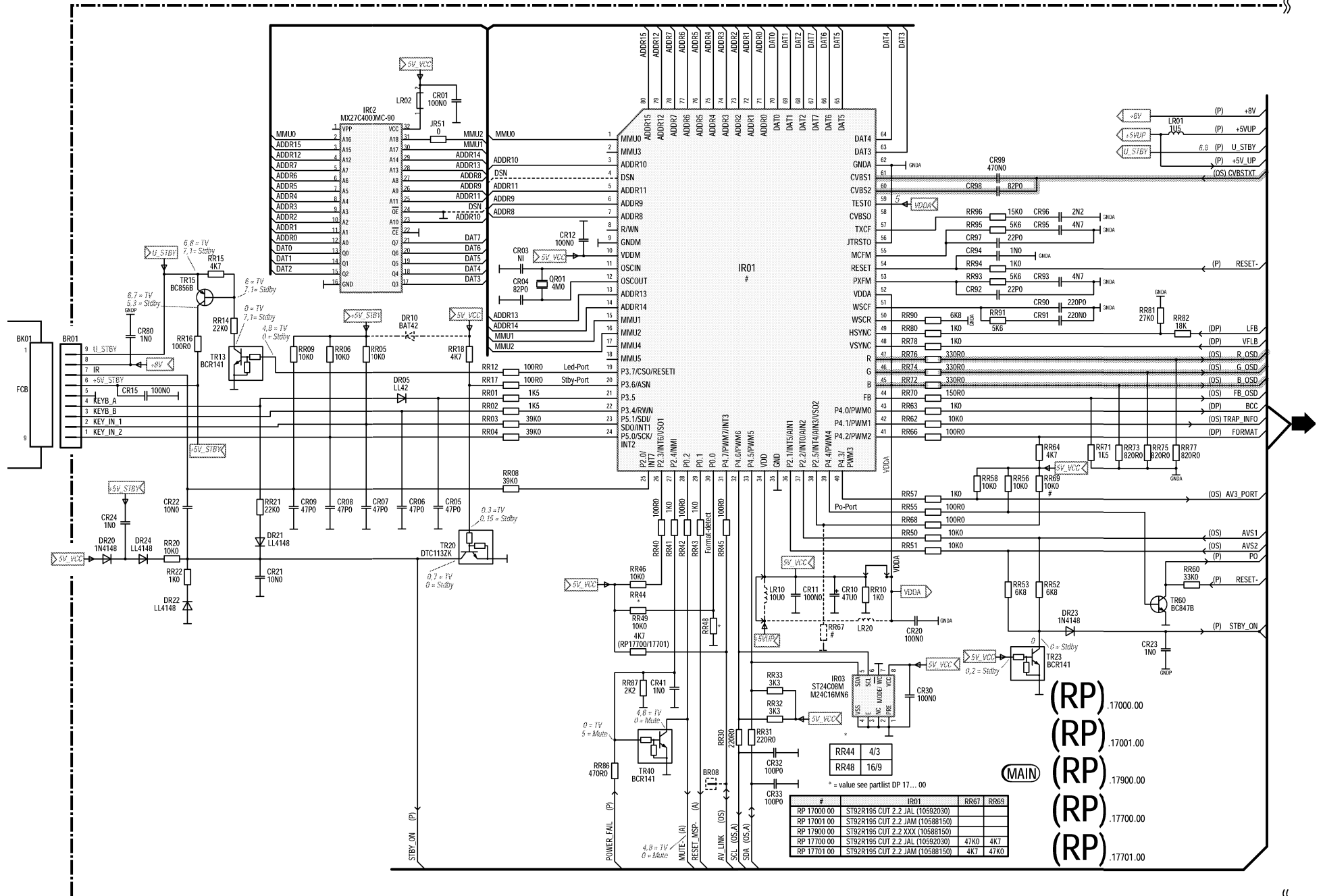
**Cuidado:**  
Medida en el bloque de alimentacion  
- Utilizar la masa del bloque de alimentacion ( PGND ).

Part of board connected to mains supply.  
Partie du châssis reliée au secteur.  
Primärseite des Netzteils.  
Parte dello chassis collegata alla rete.  
Parte del chassiss conectar a la red.

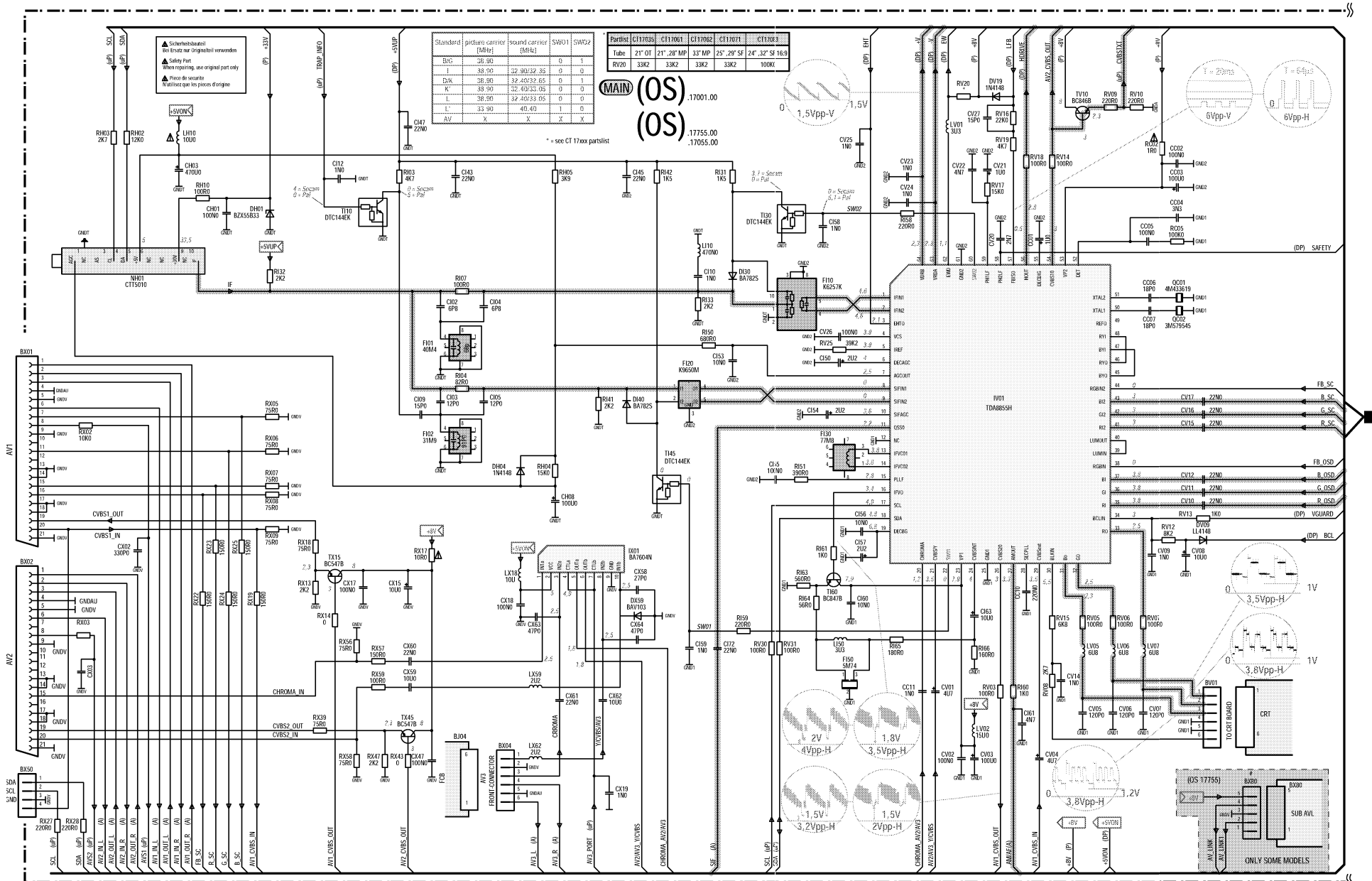




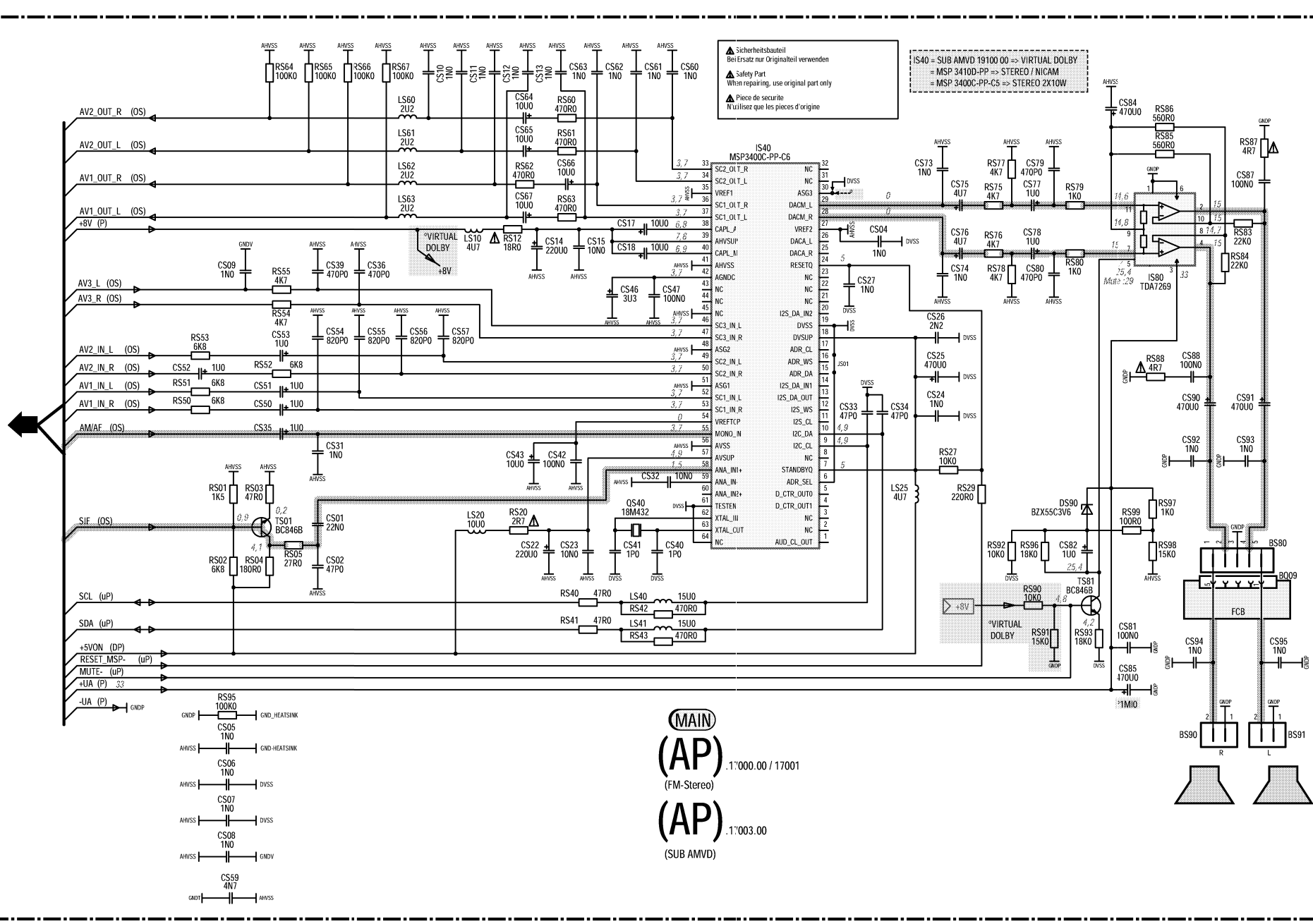




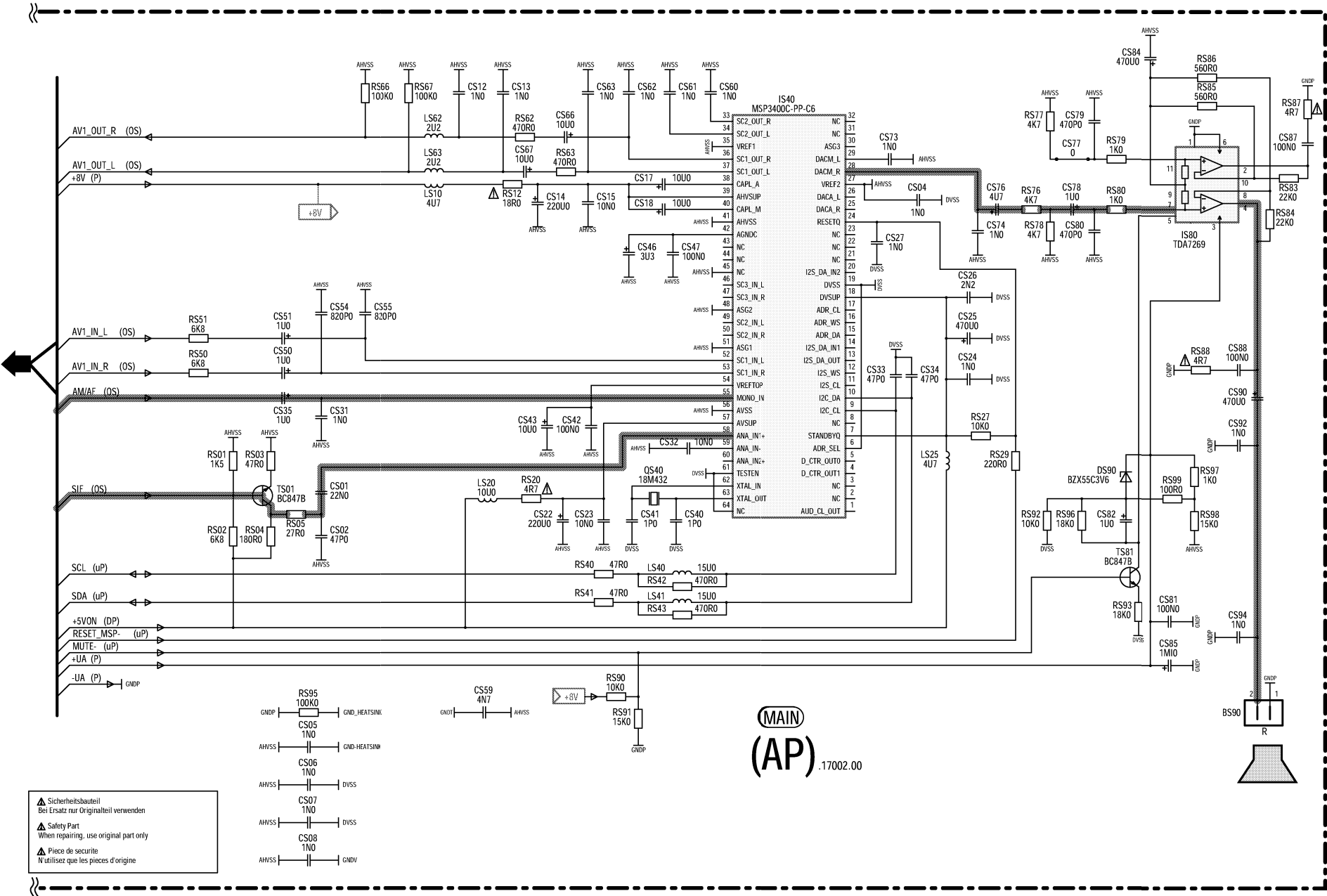
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO  
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR / TRATAMENTO VIDEO



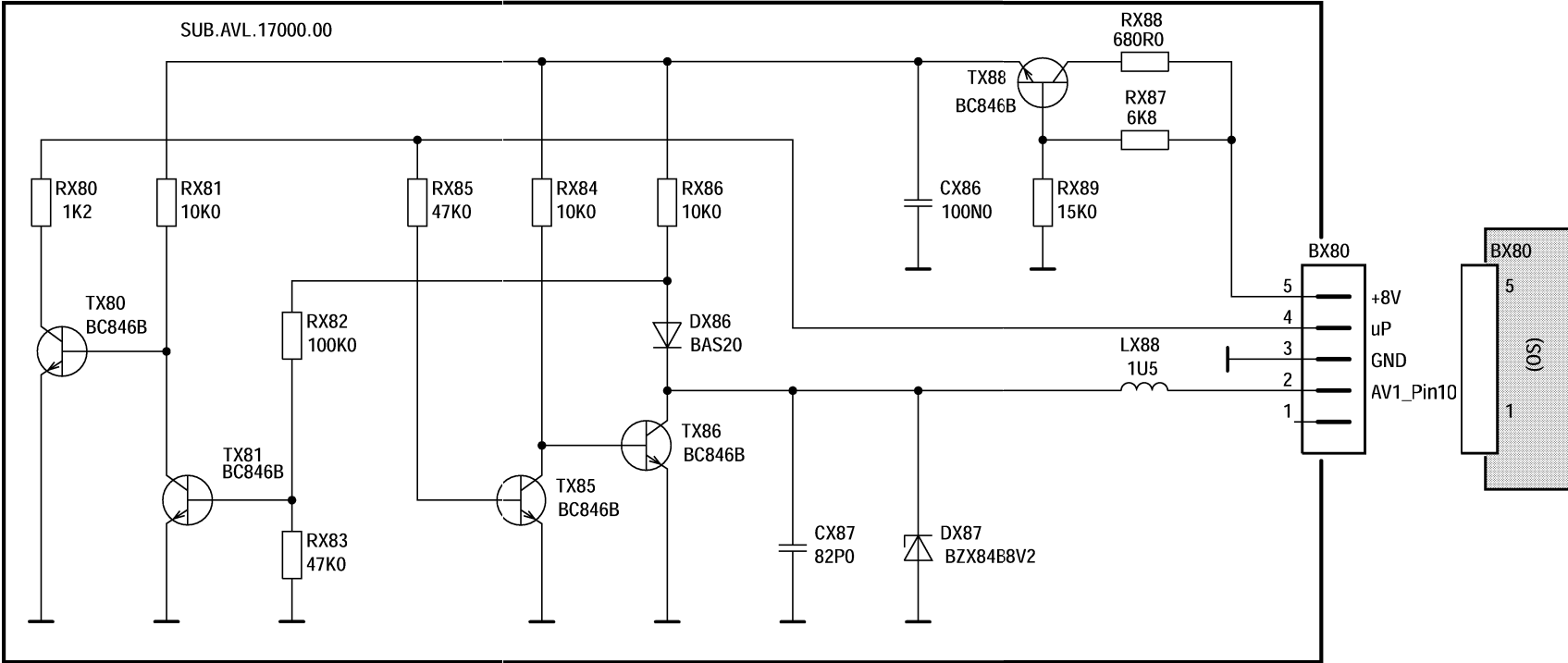
# AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE ESQUEMA DEL AMPLIFICADOR (STEREO)



AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)



SUB AVL 17000



**(S) : standby**

**Note :**  
During measurements in the power supply unit  
- Use the primary power unit ground (PGND).

**Attention :**  
Mesure dans le bloc alimentation  
- Utiliser la masse du bloc alimentation (PGND).

**Achtung :**  
Bei Messungen im Primärnetzteil  
- Primärnetzteilmasse verwenden (PGND).

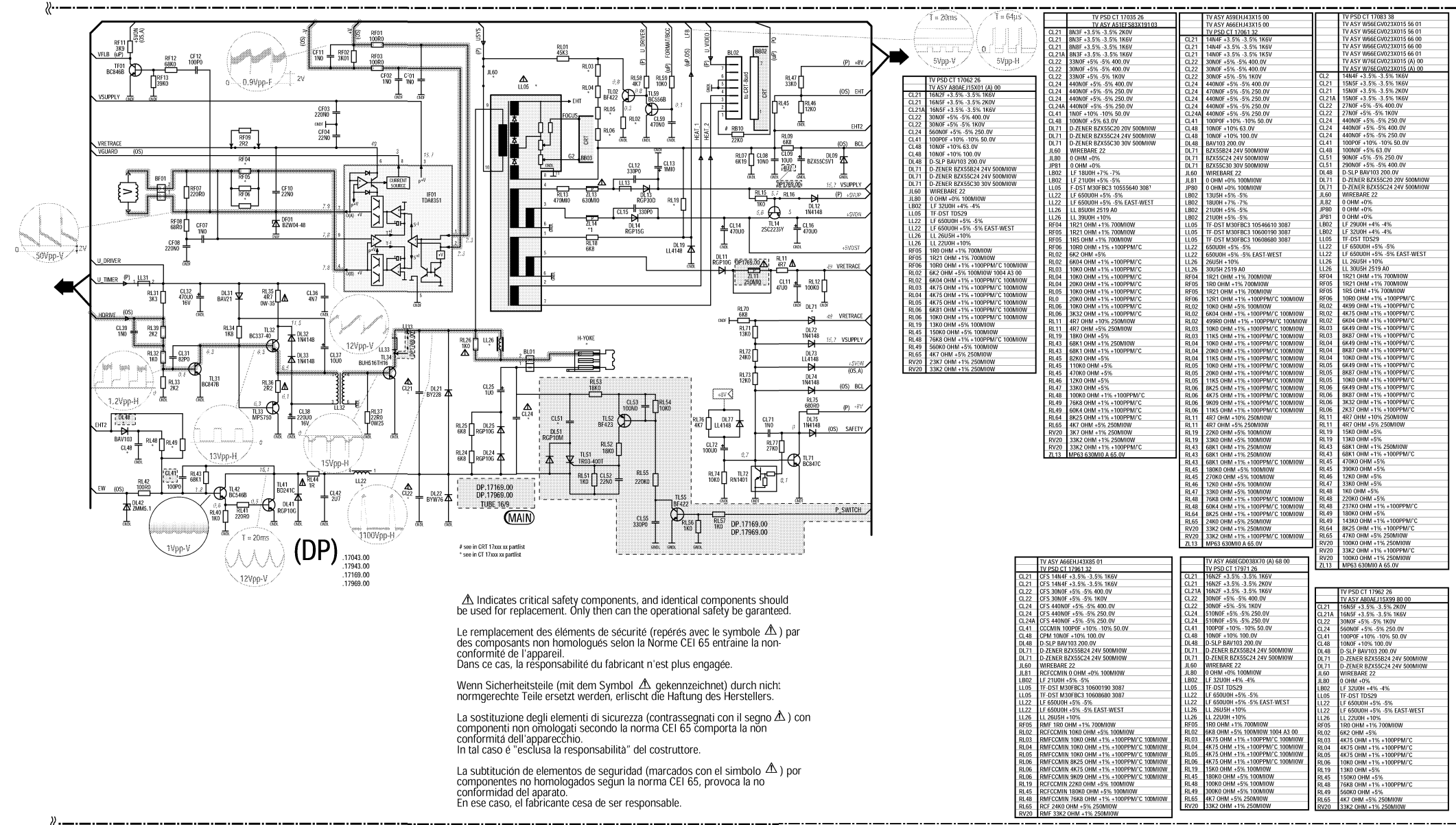
**Attenzione :**  
misura nell'alimentatore primario  
- usare massa alimentazione primario (PGND).

**Cuidado :**  
Medida en el bloque de alimentación  
- Utilizar la masa del bloque de alimentación (PGND).

Part of board connected to mains supply.  
Partie du châssis reliée au secteur.  
Primärseite des Netzteils.  
Parte dello chassis collegata alla rete.  
Parte del chassis conectar a la red.

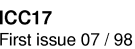
**(MAIN) (PP)**  
17000  
17004  
17900

**Diagram Description:**  
This is a detailed electronic schematic for a power supply unit, specifically for models 17000, 17004, and 17900. The circuit includes a power transformer (BP15A) connected to a degaussing coil and mains supply. The schematic shows various power stages, including a full-bridge rectifier (BP15A, BP15B, BP15C, BP15D), a filter capacitor (CP15), and a voltage doubler (BP15A, BP15B, BP15C, BP15D). The output is regulated by a series of transistors (TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14, TP15, TP16, TP17, TP18, TP19, TP20, TP21, TP22, TP23, TP24, TP25, TP26, TP27, TP28, TP29, TP30, TP31, TP32, TP33, TP34, TP35, TP36, TP37, TP38, TP39, TP40, TP41, TP42, TP43, TP44, TP45, TP46, TP47, TP48, TP49, TP50, TP51, TP52, TP53, TP54, TP55, TP56, TP57, TP58, TP59, TP60, TP61, TP62, TP63, TP64, TP65, TP66, TP67, TP68, TP69, TP70, TP71, TP72, TP73, TP74, TP75, TP76, TP77, TP78, TP79, TP80, TP81, TP82, TP83, TP84, TP85, TP86, TP87, TP88, TP89, TP90, TP91, TP92, TP93, TP94, TP95, TP96, TP97, TP98, TP99, TP100, TP101, TP102, TP103, TP104, TP105, TP106, TP107, TP108, TP109, TP110, TP111, TP112, TP113, TP114, TP115, TP116, TP117, TP118, TP119, TP120, TP121, TP122, TP123, TP124, TP125, TP126, TP127, TP128, TP129, TP130, TP131, TP132, TP133, TP134, TP135, TP136, TP137, TP138, TP139, TP140, TP141, TP142, TP143, TP144, TP145, TP146, TP147, TP148, TP149, TP150, TP151, TP152, TP153, TP154, TP155, TP156, TP157, TP158, TP159, TP160, TP161, TP162, TP163, TP164, TP165, TP166, TP167, TP168, TP169, TP170, TP171, TP172, TP173, TP174, TP175, TP176, TP177, TP178, TP179, TP180, TP181, TP182, TP183, TP184, TP185, TP186, TP187, TP188, TP189, TP190, TP191, TP192, TP193, TP194, TP195, TP196, TP197, TP198, TP199, TP200, TP201, TP202, TP203, TP204, TP205, TP206, TP207, TP208, TP209, TP210, TP211, TP212, TP213, TP214, TP215, TP216, TP217, TP218, TP219, TP220, TP221, TP222, TP223, TP224, TP225, TP226, TP227, TP228, TP229, TP230, TP231, TP232, TP233, TP234, TP235, TP236, TP237, TP238, TP239, TP240, TP241, TP242, TP243, TP244, TP245, TP246, TP247, TP248, TP249, TP250, TP251, TP252, TP253, TP254, TP255, TP256, TP257, TP258, TP259, TP260, TP261, TP262, TP263, TP264, TP265, TP266, TP267, TP268, TP269, TP270, TP271, TP272, TP273, TP274, TP275, TP276, TP277, TP278, TP279, TP280, TP281, TP282, TP283, TP284, TP285, TP286, TP287, TP288, TP289, TP290, TP291, TP292, TP293, TP294, TP295, TP296, TP297, TP298, TP299, TP300, TP301, TP302, TP303, TP304, TP305, TP306, TP307, TP308, TP309, TP310, TP311, TP312, TP313, TP314, TP315, TP316, TP317, TP318, TP319, TP320, TP321, TP322, TP323, TP324, TP325, TP326, TP327, TP328, TP329, TP330, TP331, TP332, TP333, TP334, TP335, TP336, TP337, TP338, TP339, TP340, TP341, TP342, TP343, TP344, TP345, TP346, TP347, TP348, TP349, TP350, TP351, TP352, TP353, TP354, TP355, TP356, TP357, TP358, TP359, TP360, TP361, TP362, TP363, TP364, TP365, TP366, TP367, TP368, TP369, TP370, TP371, TP372, TP373, TP374, TP375, TP376, TP377, TP378, TP379, TP380, TP381, TP382, TP383, TP384, TP385, TP386, TP387, TP388, TP389, TP390, TP391, TP392, TP393, TP394, TP395, TP396, TP397, TP398, TP399, TP400, TP401, TP402, TP403, TP404, TP405, TP406, TP407, TP408, TP409, TP410, TP411, TP412, TP413, TP414, TP415, TP416, TP417, TP418, TP419, TP420, TP421, TP422, TP423, TP424, TP425, TP426, TP427, TP428, TP429, TP430, TP431, TP432, TP433, TP434, TP435, TP436, TP437, TP438, TP439, TP440, TP441, TP442, TP443, TP444, TP445, TP446, TP447, TP448, TP449, TP450, TP451, TP452, TP453, TP454, TP455, TP456, TP457, TP458, TP459, TP460, TP461, TP462, TP463, TP464, TP465, TP466, TP467, TP468, TP469, TP470, TP471, TP472, TP473, TP474, TP475, TP476, TP477, TP478, TP479, TP480, TP481, TP482, TP483, TP484, TP485, TP486, TP487, TP488, TP489, TP490, TP491, TP492, TP493, TP494, TP495, TP496, TP497, TP498, TP499, TP500, TP501, TP502, TP503, TP504, TP505, TP506, TP507, TP508, TP509, TP510, TP511, TP512, TP513, TP514, TP515, TP516, TP517, TP518, TP519, TP520, TP521, TP522, TP523, TP524, TP525, TP526, TP527, TP528, TP529, TP530, TP531, TP532, TP533, TP534, TP535, TP536, TP537, TP538, TP539, TP540, TP541, TP542, TP543, TP544, TP545, TP546, TP547, TP548, TP549, TP550, TP551, TP552, TP553, TP554, TP555, TP556, TP557, TP558, TP559, TP560, TP561, TP562, TP563, TP564, TP565, TP566, TP567, TP568, TP569, TP570, TP571, TP572, TP573, TP574, TP575, TP576, TP577, TP578, TP579, TP580, TP581, TP582, TP583, TP584, TP585, TP586, TP587, TP588, TP589, TP590, TP591, TP592, TP593, TP594, TP595, TP596, TP597, TP598, TP599, TP600, TP601, TP602, TP603, TP604, TP605, TP606, TP607, TP608, TP609, TP610, TP611, TP612, TP613, TP614, TP615, TP616, TP617, TP618, TP619, TP620, TP621, TP622, TP623, TP624, TP625, TP626, TP627, TP628, TP629, TP630, TP631, TP632, TP633, TP634, TP635, TP636, TP637, TP638, TP639, TP640, TP641, TP642, TP643, TP644, TP645, TP646, TP647, TP648, TP649, TP650, TP651, TP652, TP653, TP654, TP655, TP656, TP657, TP658, TP659, TP660, TP661, TP662, TP663, TP664, TP665, TP666, TP667, TP668, TP669, TP670, TP671, TP672, TP673, TP674, TP675, TP676, TP677, TP678, TP679, TP680, TP681, TP682, TP683, TP684, TP685, TP686, TP687, TP688, TP689, TP690, TP691, TP692, TP693, TP694, TP695, TP696, TP697, TP698, TP699, TP700, TP701, TP702, TP703, TP704, TP705, TP706, TP707, TP708, TP709, TP710, TP711, TP712, TP713, TP714, TP715, TP716, TP717, TP718, TP719, TP720, TP721, TP722, TP723, TP724, TP725, TP726, TP727, TP728, TP729, TP730, TP731, TP732, TP733, TP734, TP735, TP736, TP737, TP738, TP739, TP740, TP741, TP742, TP743, TP744, TP745, TP746, TP747, TP748, TP749, TP750, TP751, TP752

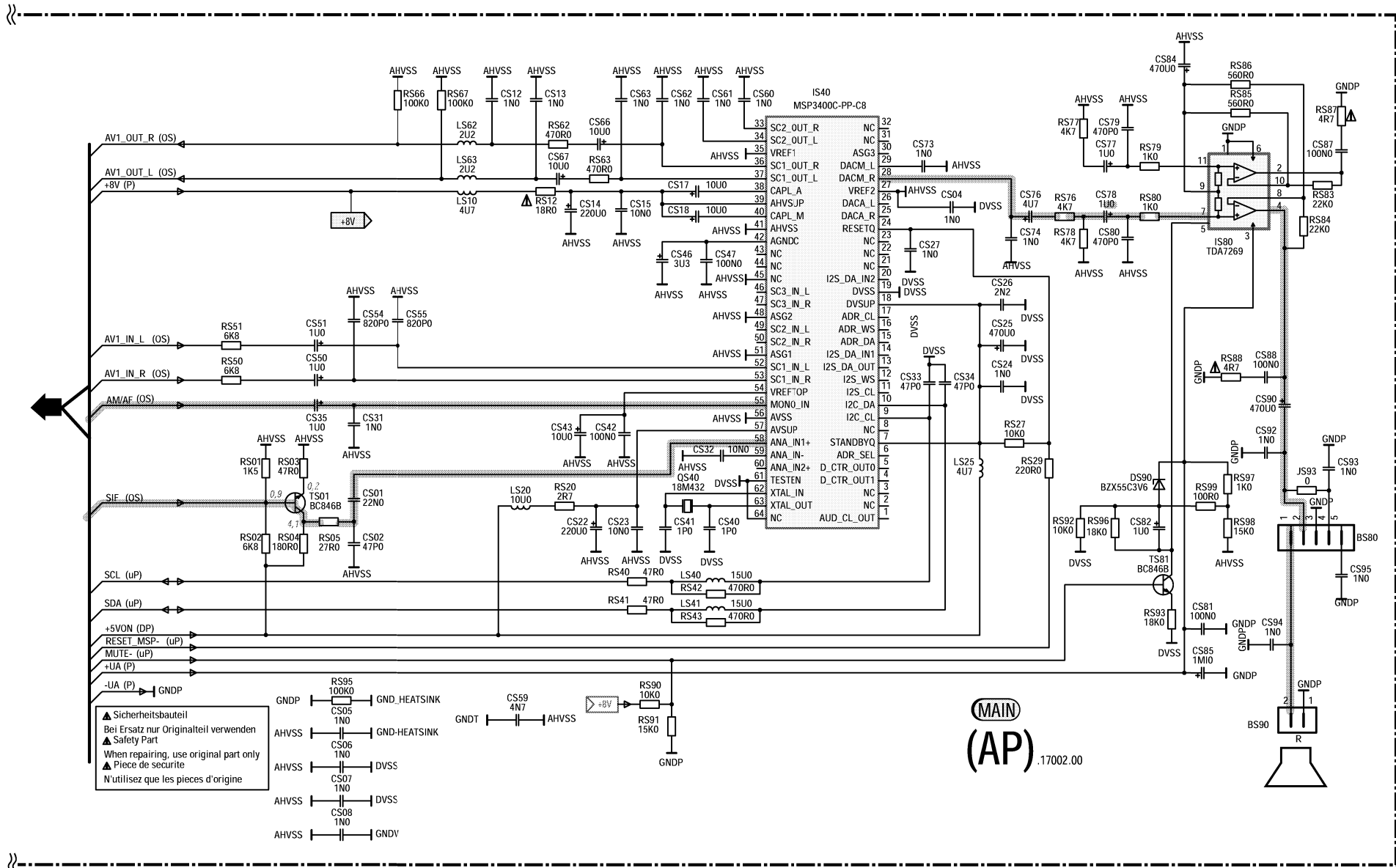








AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)



(S) : standby

**Note :**  
During measurements in the power supply unit  
- Use the primary power unit ground (PGND).  
**Attention :**  
Mesure dans le bloc alimentation  
- Utiliser la masse du bloc alimentation (PGND).  
**Achtung :**  
Bei Messungen im Primärnetzteil  
- Primärnetzteilmasse verwenden (PGND).  
**Attenzione :**  
misura nell'alimentatore primario  
- usare massa alimentazione primario (PGND).  
**Cuidado :**  
Medida en el bloque de alimentación  
- Utilizar la masa del bloque de alimentación (PGND).

Part of board connected to mains supply.  
Partie du chassis reliée au secteur.  
Primärseite des Netzteils.  
Parte dello chassis collegata alla rete.  
Parte del chassis conectar a la red.

**MAIN**  
**(PP)**  
17000  
17004  
17900

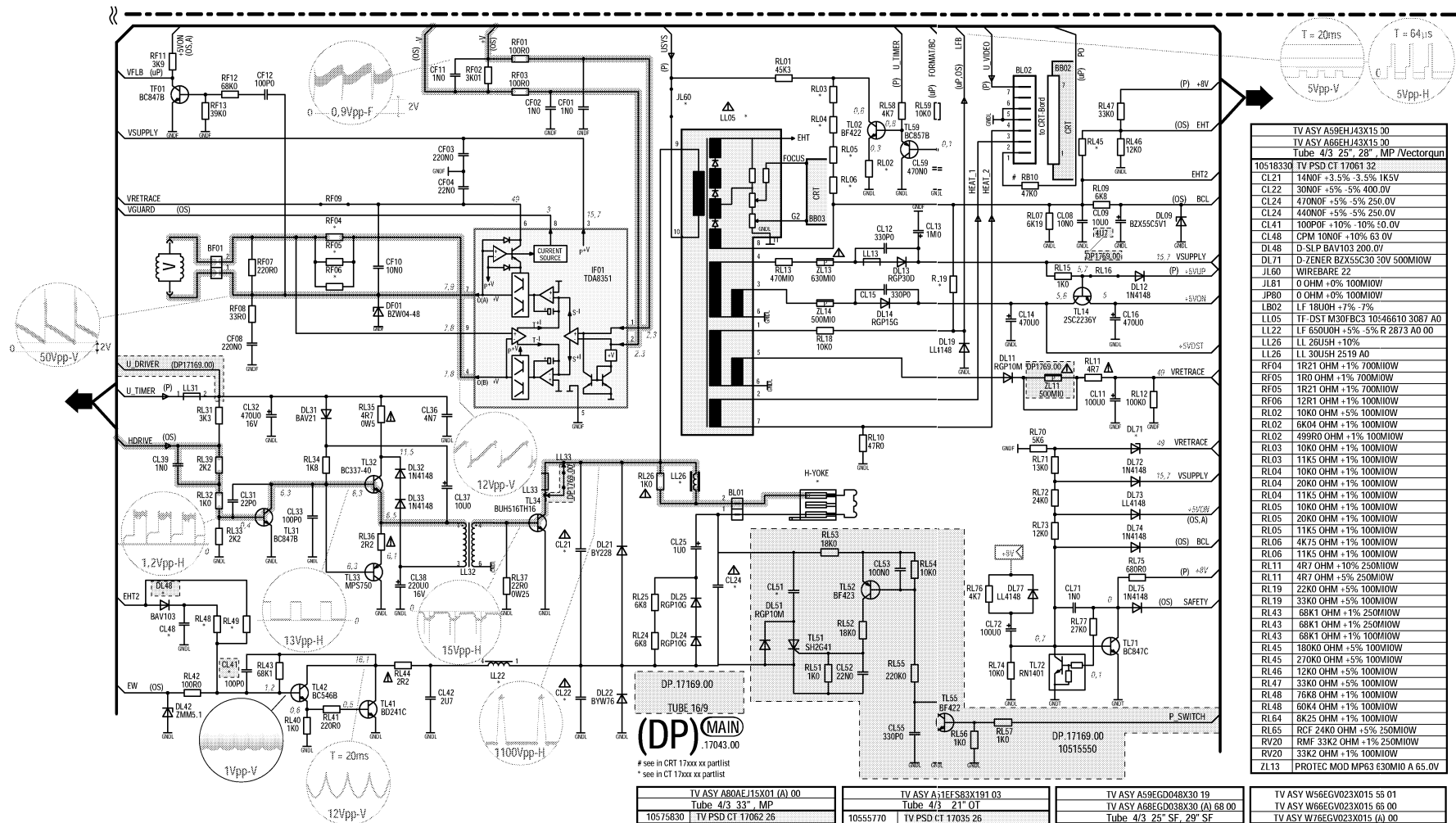
| #           | DP84   | LP50     | DP98 | RP85 |
|-------------|--------|----------|------|------|
| PP 17000 00 | MUR120 | 10S37860 | -    | X    |
| PP 17004 00 | MUR420 | 10S90560 | X    | -    |

| Partlist | CT 17095 | CT 17061   | CT 17062 | CT 17071   | CT 17083        |
|----------|----------|------------|----------|------------|-----------------|
| tube     | 21" 01"  | 25" 28" MP | 33" MP   | 25" 29" SF | 24" 32" SF 16.9 |
| Usys     | 126V     | 132V       | 126V     | 126V       | 138V            |
| LL80-B2  | JL80     | JL81       | JL80     | JL80       | JL82            |
| RL65     | 4K7      | 24K0       | 4K7      | 4K7        | 47K0            |

PP.17000.00 => 10515500 => 17.12.98  
PP.17004.00 => 10590630 => 17.12.98

▲ Sicherheitsbauteil  
Bei Ersatz nur Originalteil verwenden  
▲ Safety Part  
When repairing, use original part only  
▲ Pièce de sécurité  
N'utilisez que les pièces d'origine



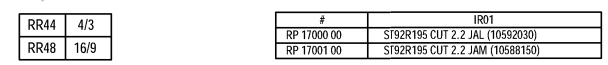
⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.  
Dans ce cas, la responsabilité du fabricant n'est plus engagée.

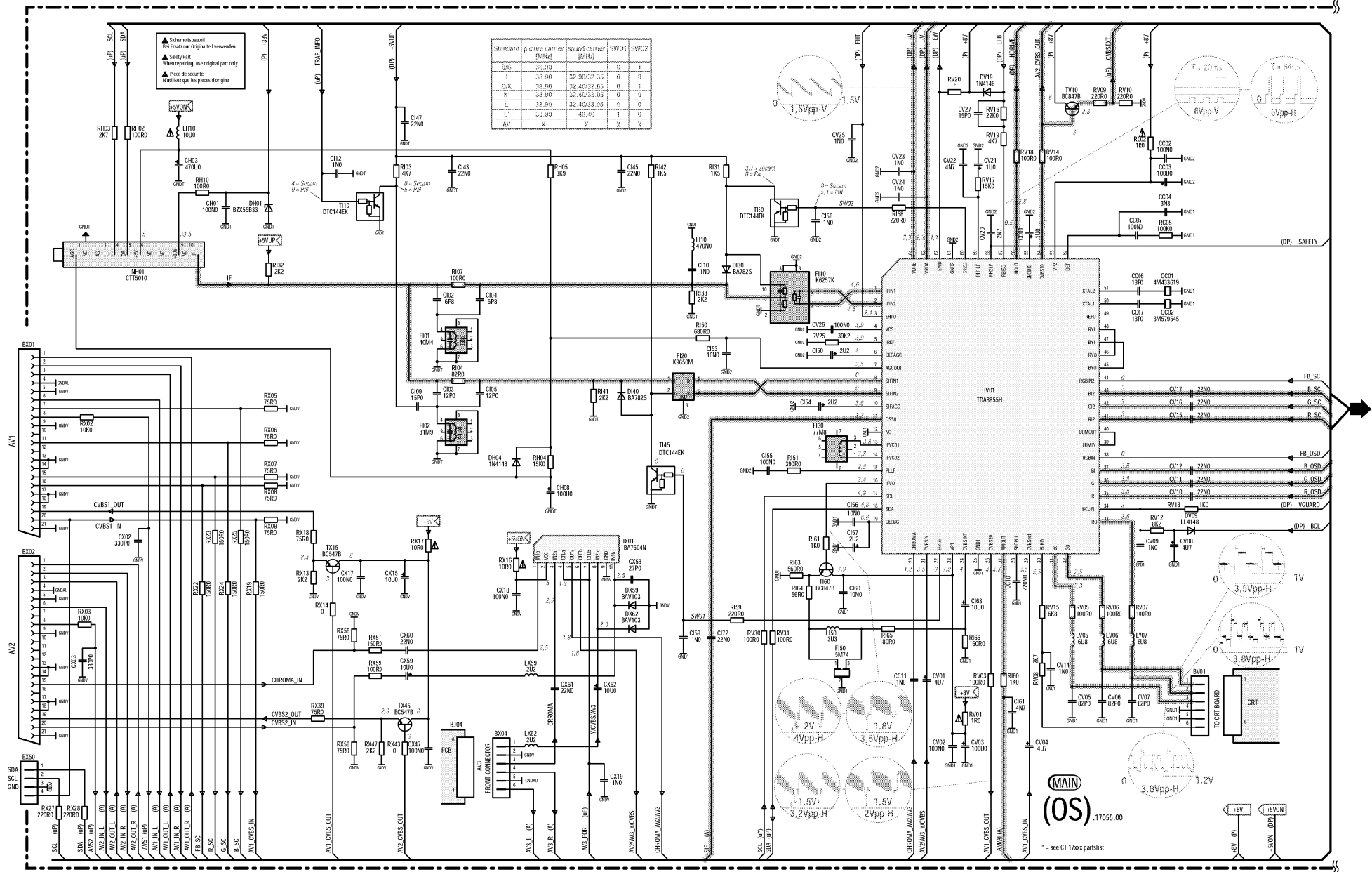
Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (contrassegnati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.  
In tal caso è "esclusa la responsabilità" del costruttore.

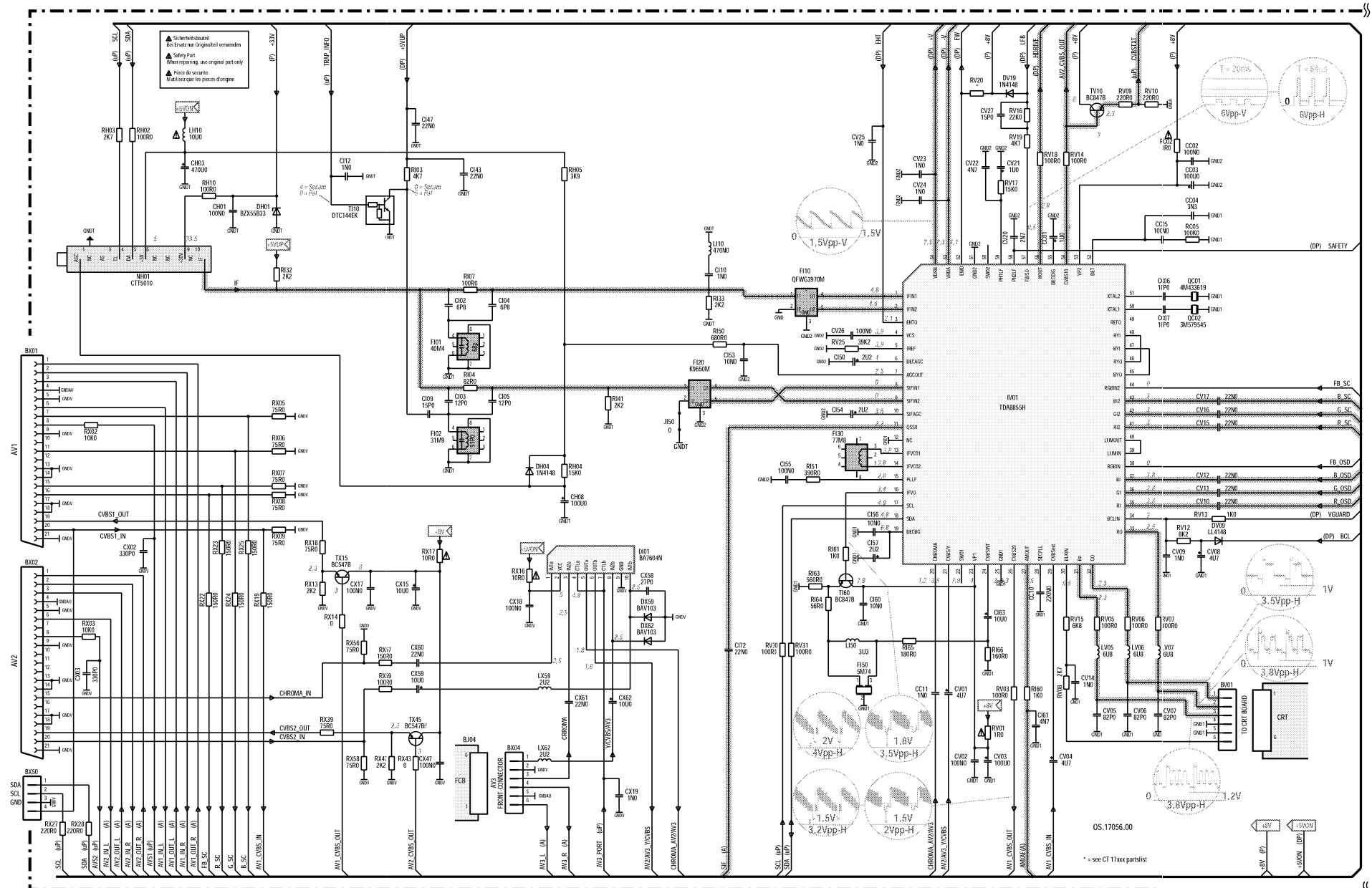
La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.  
En ese caso, el fabricante cesa de ser responsable.



RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO  
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR / TRATAMENTO VIDEO



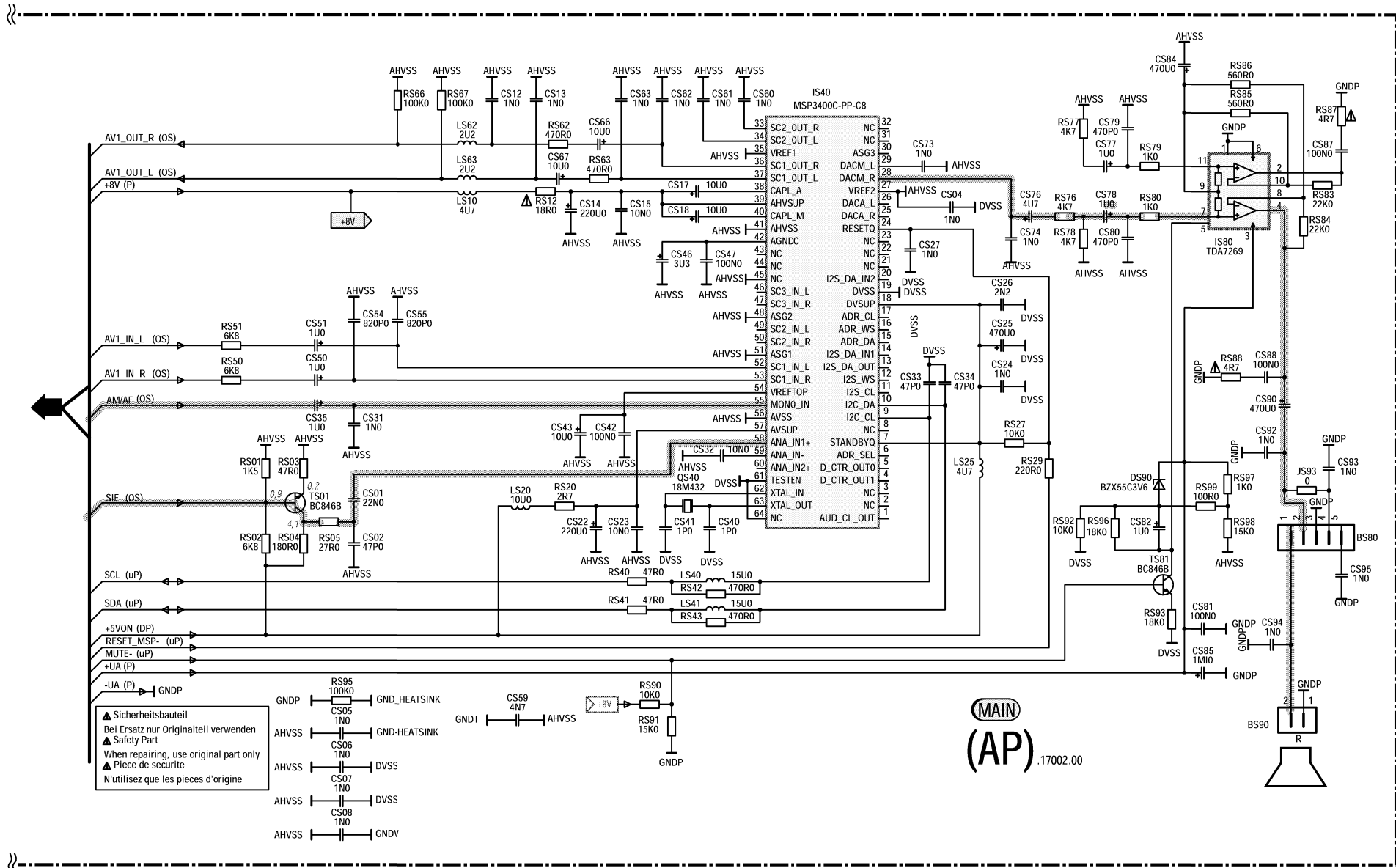
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO  
SIGNALVERARBEITUNG - RF/FI/PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO







AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)



# POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN

(5) : standby

## Note :

During measurements in the power supply unit

- Use the primary power unit ground (PGND)

## Attention :

Mesure dans le bloc alimentation

- Utiliser la masse du bloc alimentation (PGND)

## Achtung :

Bei Messungen im Primärnetzteil

- Primärnetzteilmasse verwenden (PGND)

## Attenzione :

misure nell'alimentatore primario

- usare massa alimentazione primario (PGND)

## Cuidado :

Medida en el bloque de alimentacion

- Utilizar la masa del bloque de alimentacion (PGND)

Part of board connected to mains supply.

Partie du châssis reliée au secteur.

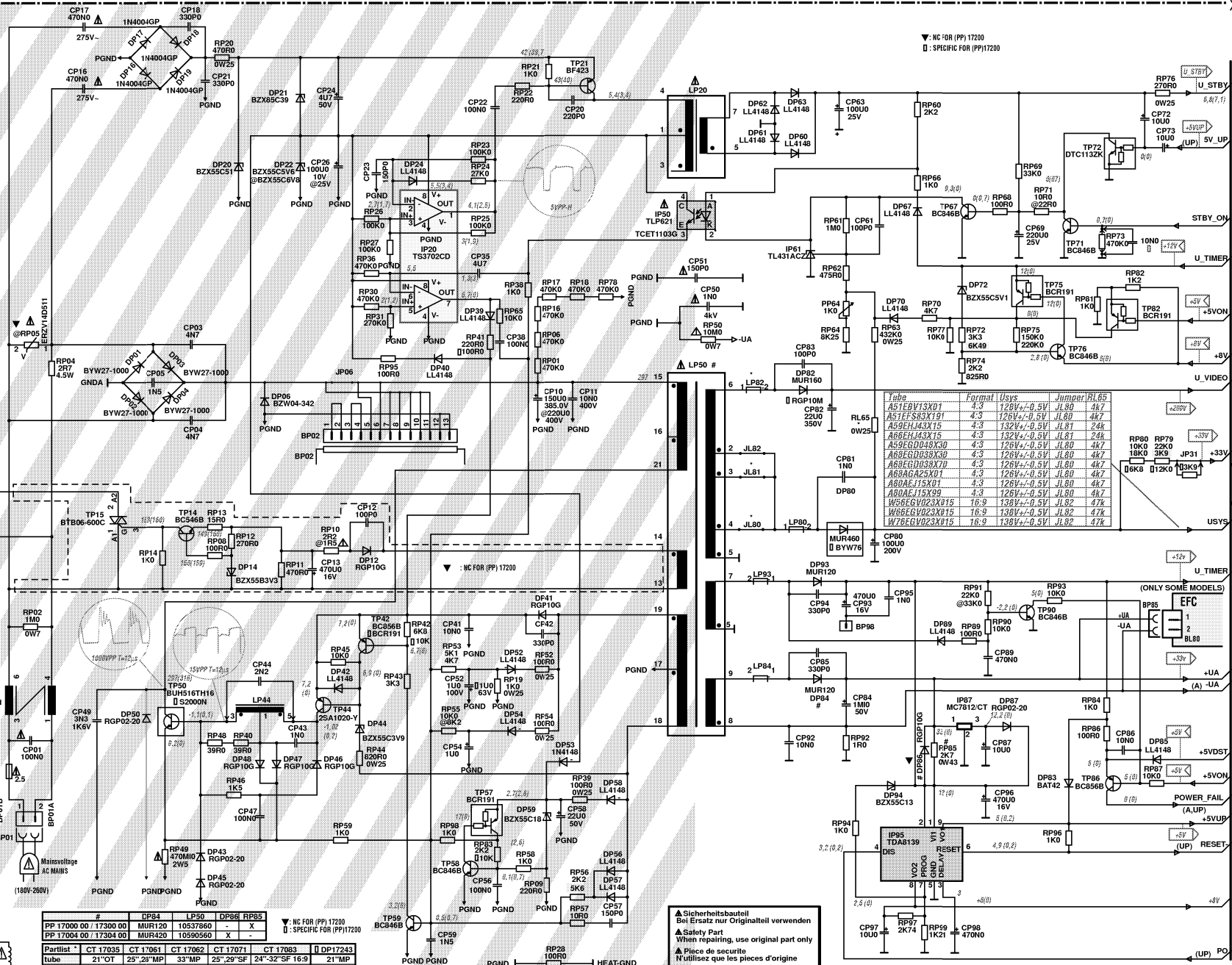
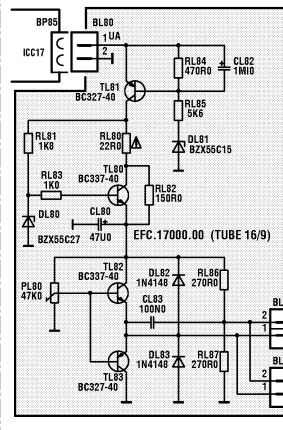
Primärseite des Netzteils.

Parte dello chassis collegata alla rete.

Parte del chassis conectar a la red.

(MAIN)  
(PP)

17000  
17004  
17200  
17300  
17304  
17900



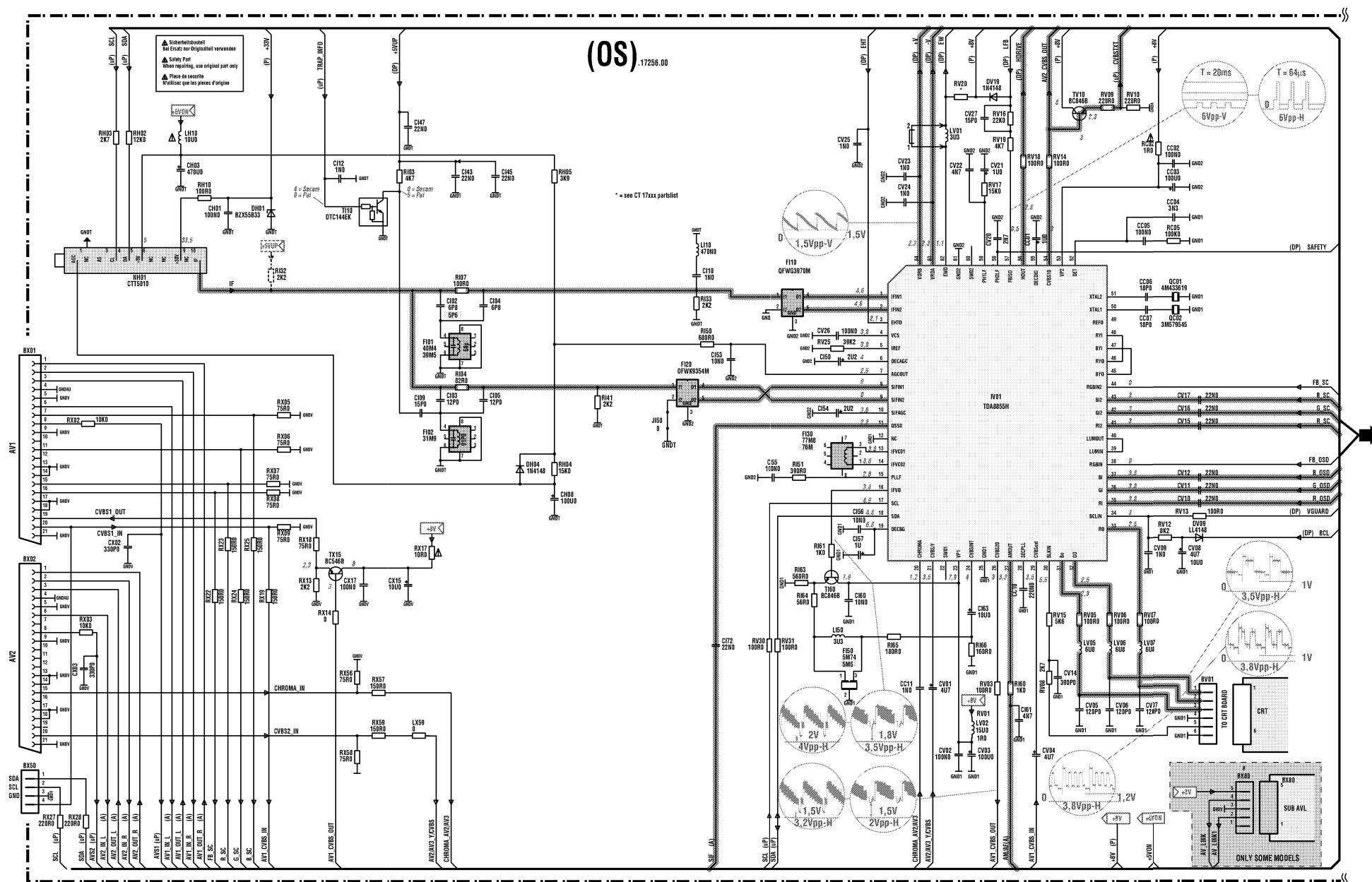
▽: NC FOR (PP) 17200  
□: SPECIFIC FOR (PP) 17200

▲ Sicherheitsbauteil  
Bei Ersatz nur Originalteil verwenden  
▲ Safety Part  
When repairing, use original part only  
▲ Pièce de sécurité  
N'utilisez que les pièces d'origine





RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO  
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO



»-



# POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN

(S) : standby

**Note :**  
During measurements in the power supply unit  
- Use the primary power unit ground (PGND).

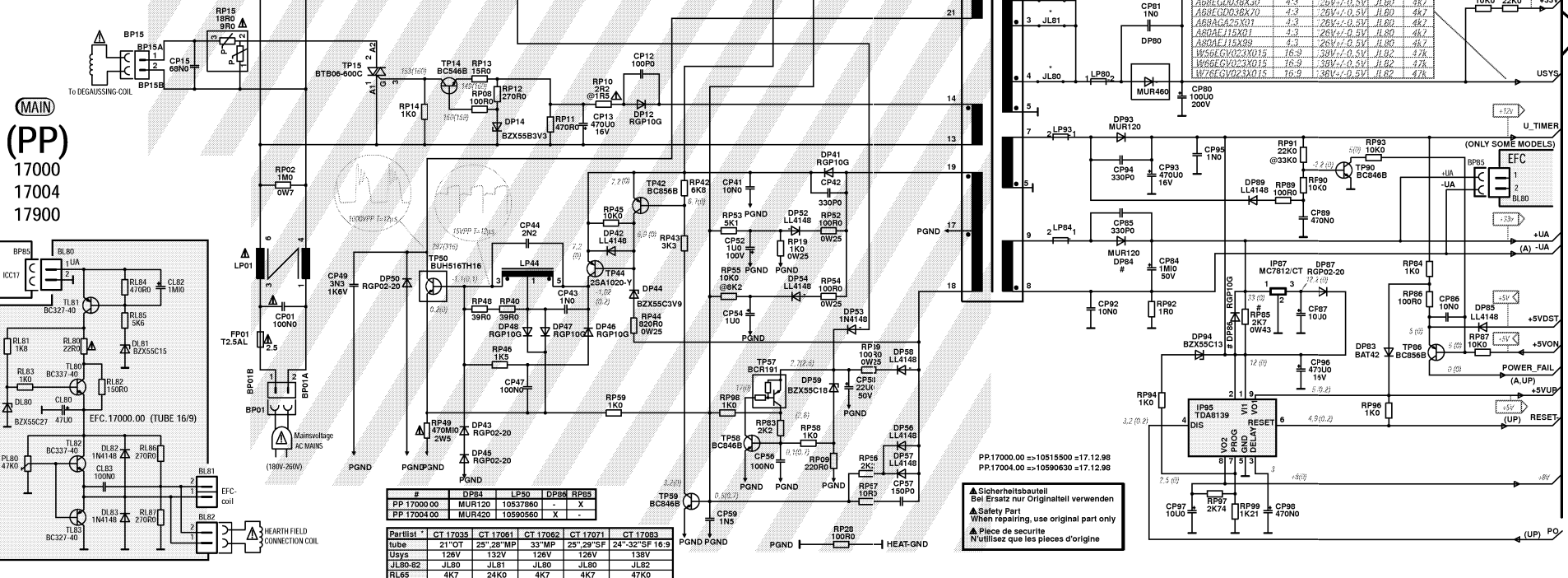
**Attention :**  
Mesure dans le bloc alimentation  
- Utiliser la masse du bloc alimentation (PGND).

**Achtung :**  
Bei Messungen im Primärnetzteil  
- Primärnetzteilmasse verwenden (PGND).

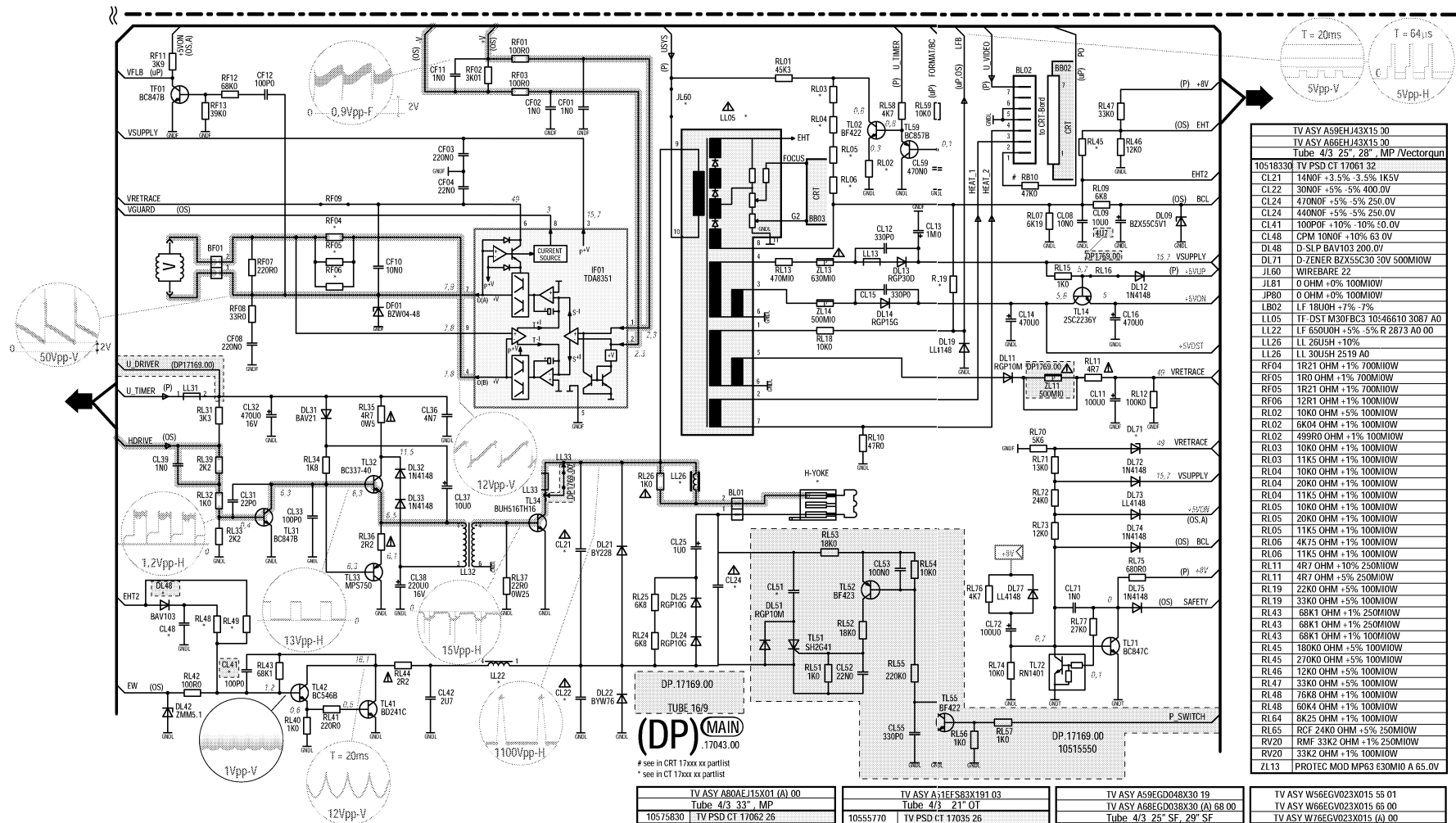
**Attenzione :**  
misure nell'alimentatore primario  
- usare massa alimentazione primario (PGND).

**Cuidado :**  
Medida en el bloque de alimentacion  
- Utilizar la masa del bloque de alimentacion (PGND).

Part of board connected to mains supply.  
Partie du châssis reliée au secteur.  
Primärseite des Netzteils.  
Parte dello chassis collegata alla rete.  
Parte del chassis conectar a la red.







⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.  
Dans ce cas, la responsabilité du fabricant n'est plus engagée.

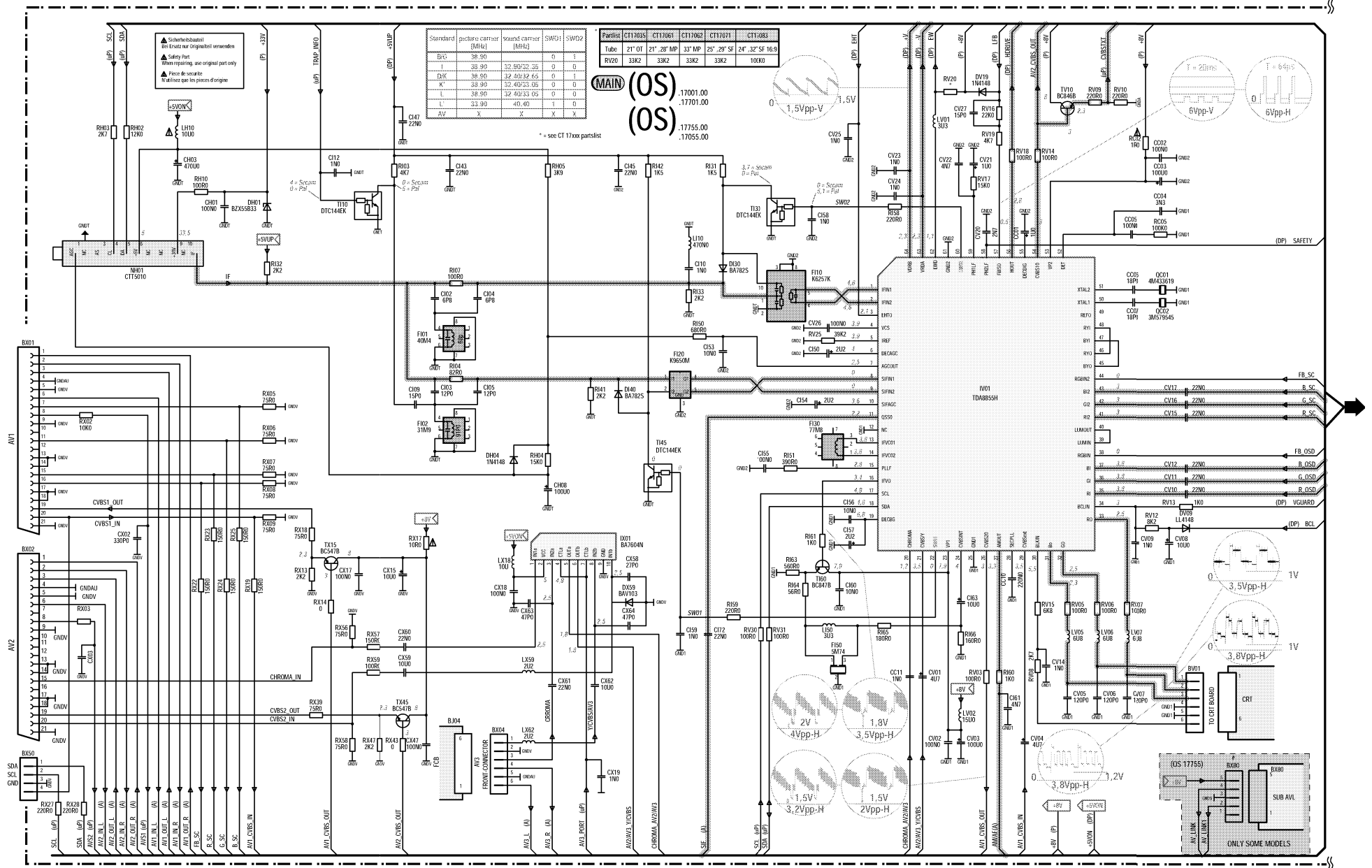
Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (contrassegnati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.  
In tal caso è "esclusa la responsabilità" del costruttore.

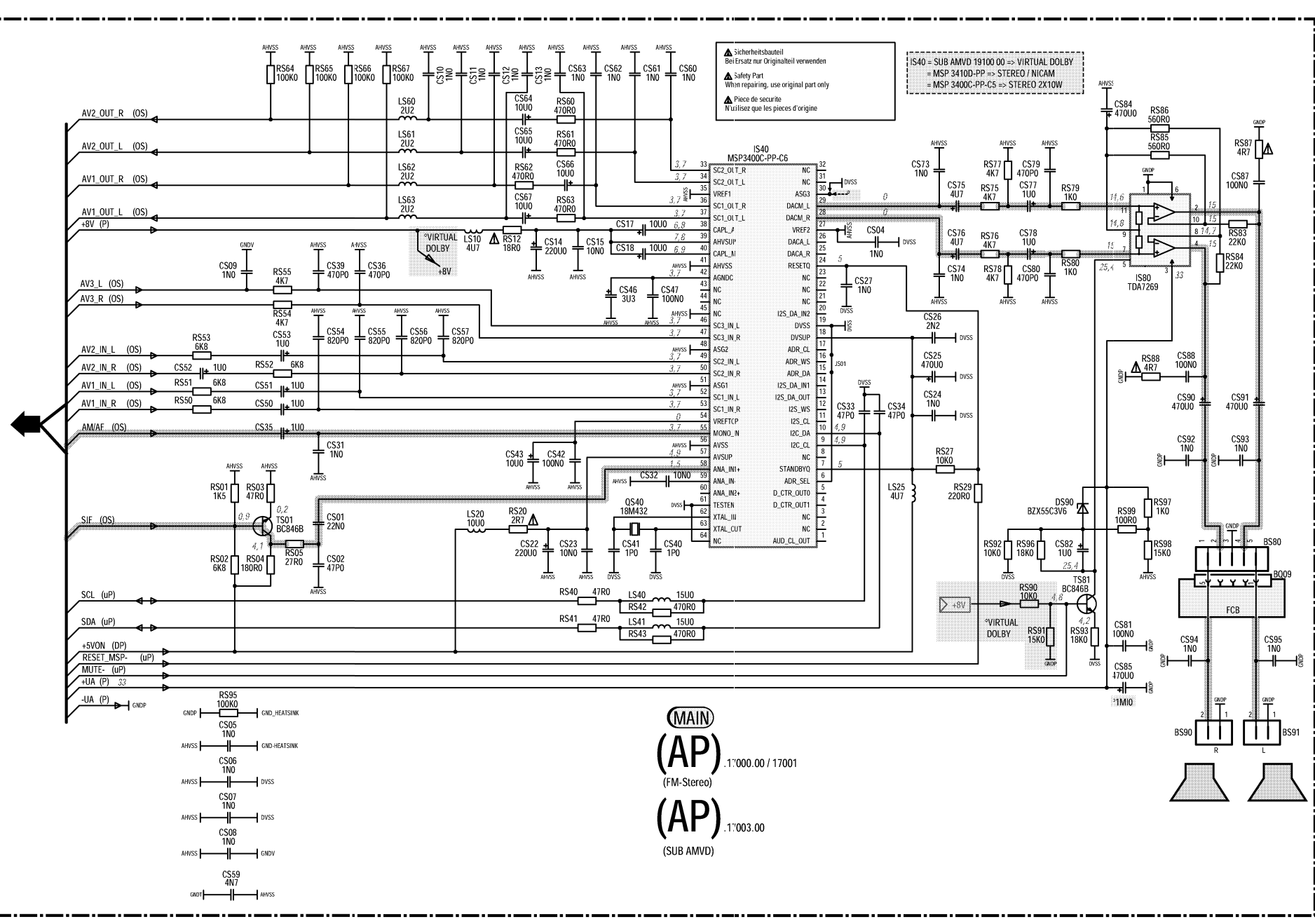
La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.  
En ese caso, el fabricante cesa de ser responsable.





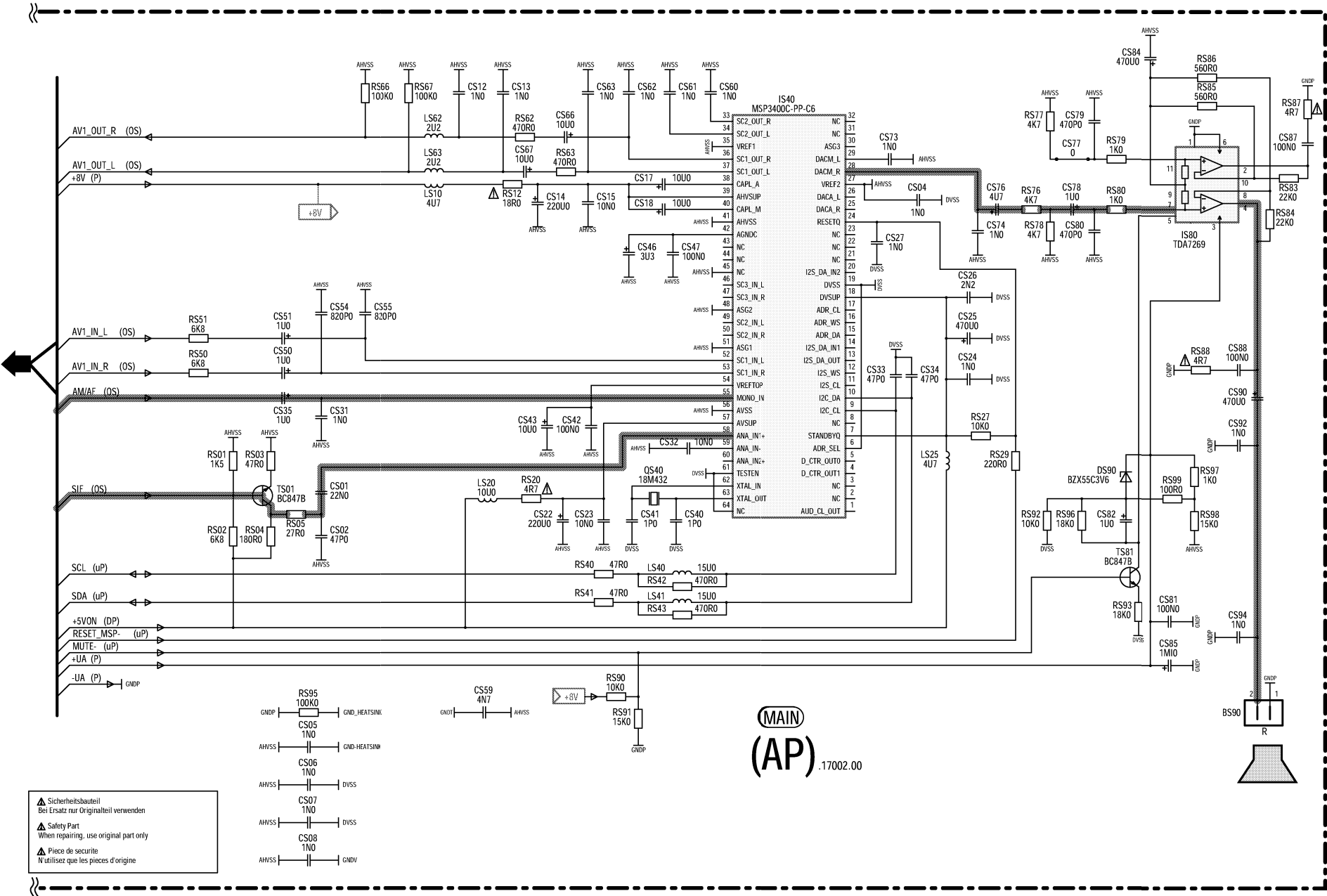


AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE  
ESQUEMA DEL AMPLIFICADOR  
(STEREO)

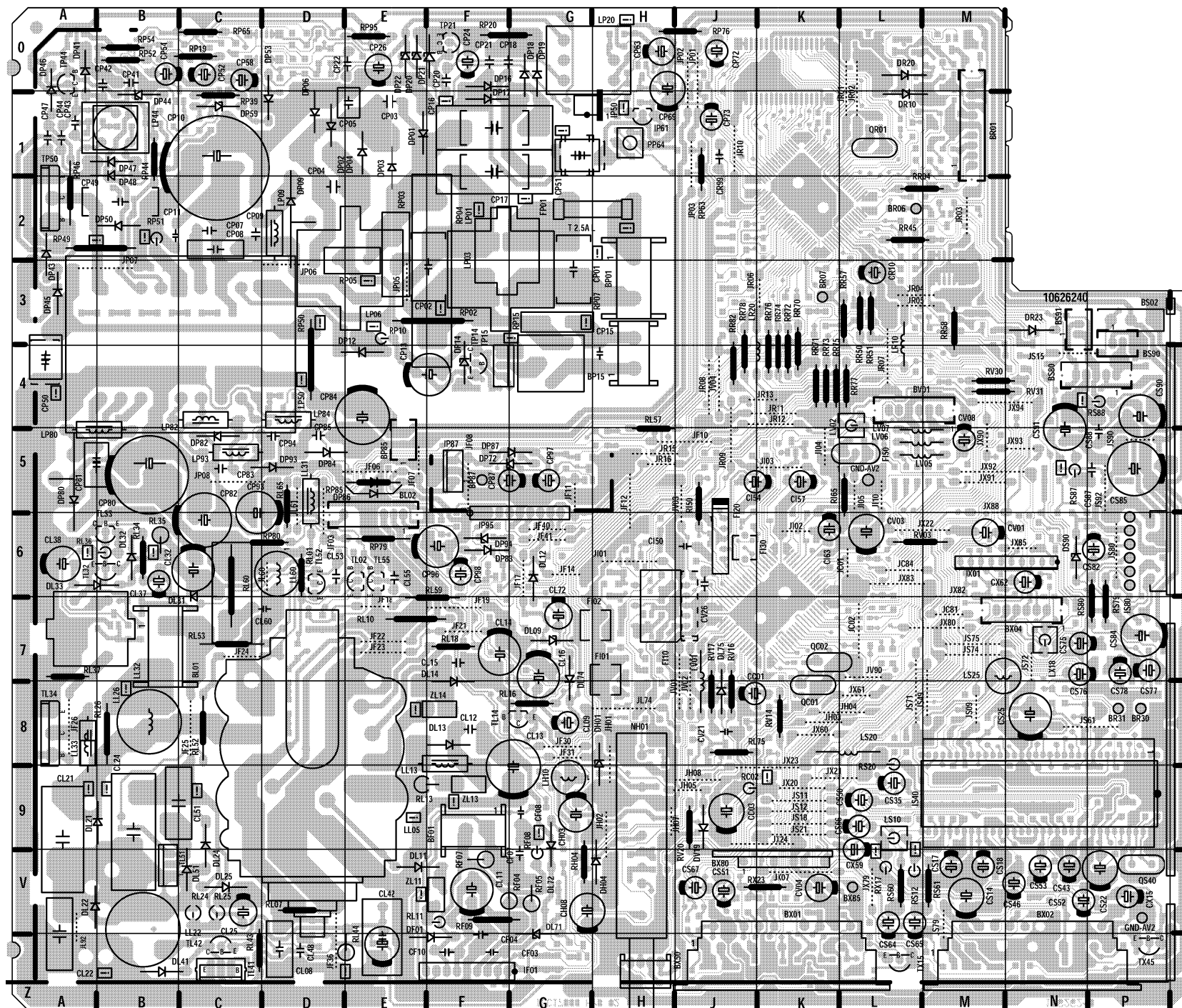


(MAIN)  
(AP) :1'000.00 / 17001  
(FM-Stereo)  
(AP) :1'003.00  
(SUB AMVD)

AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)

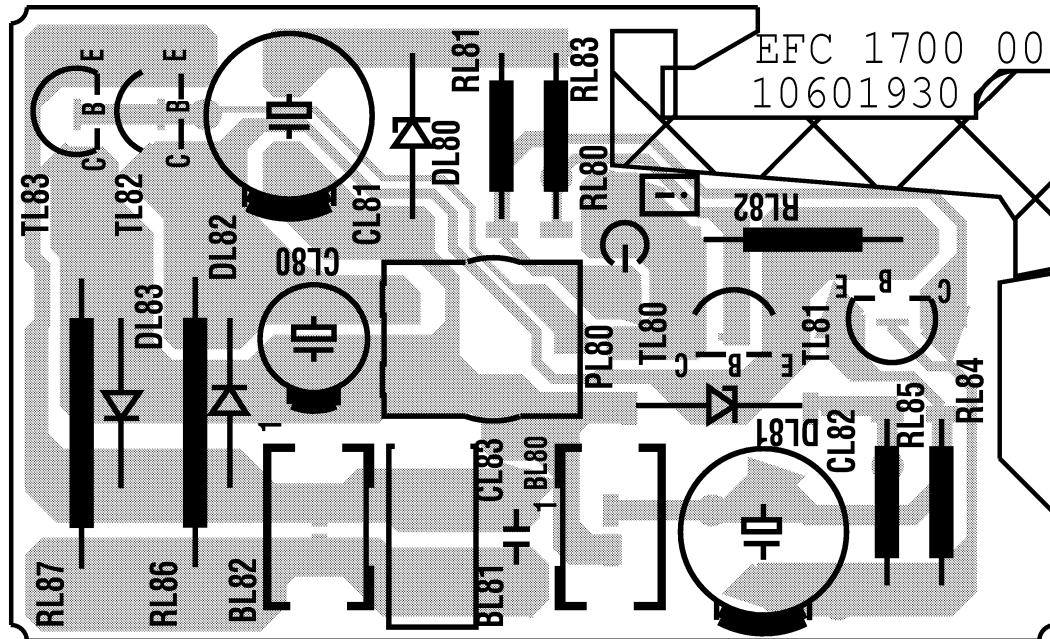


COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES

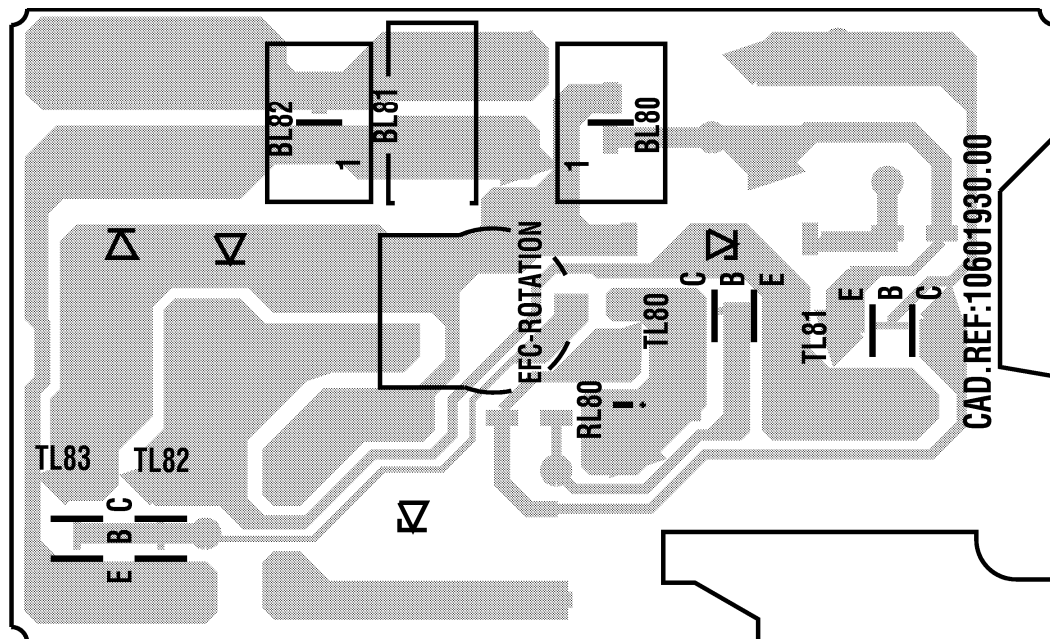


# EFC 17000 EARTH-FIELD CORRECTION BOARD

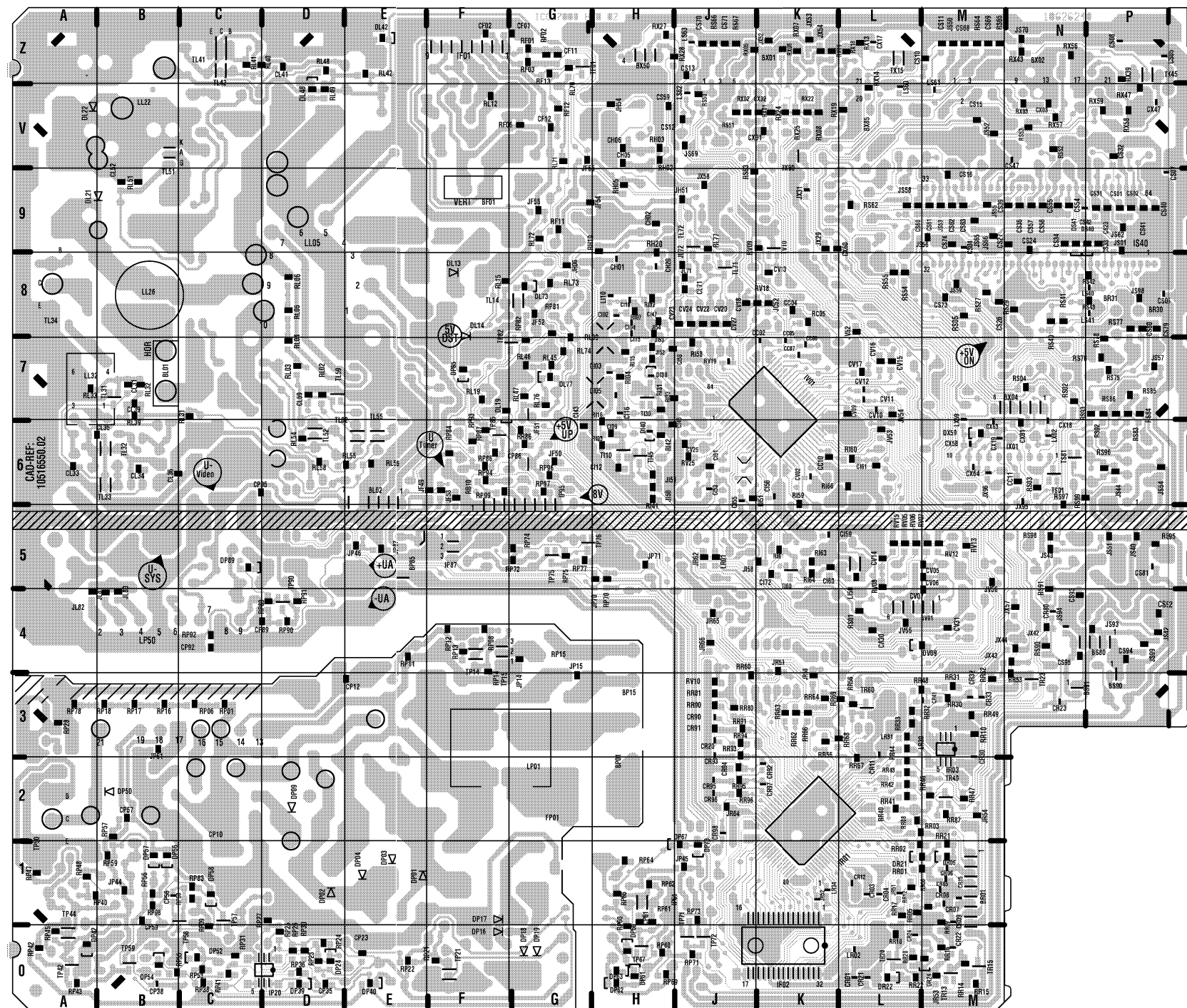
COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSEITE - LATO COMPONENTI  
LADO COMPONENTES



SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS

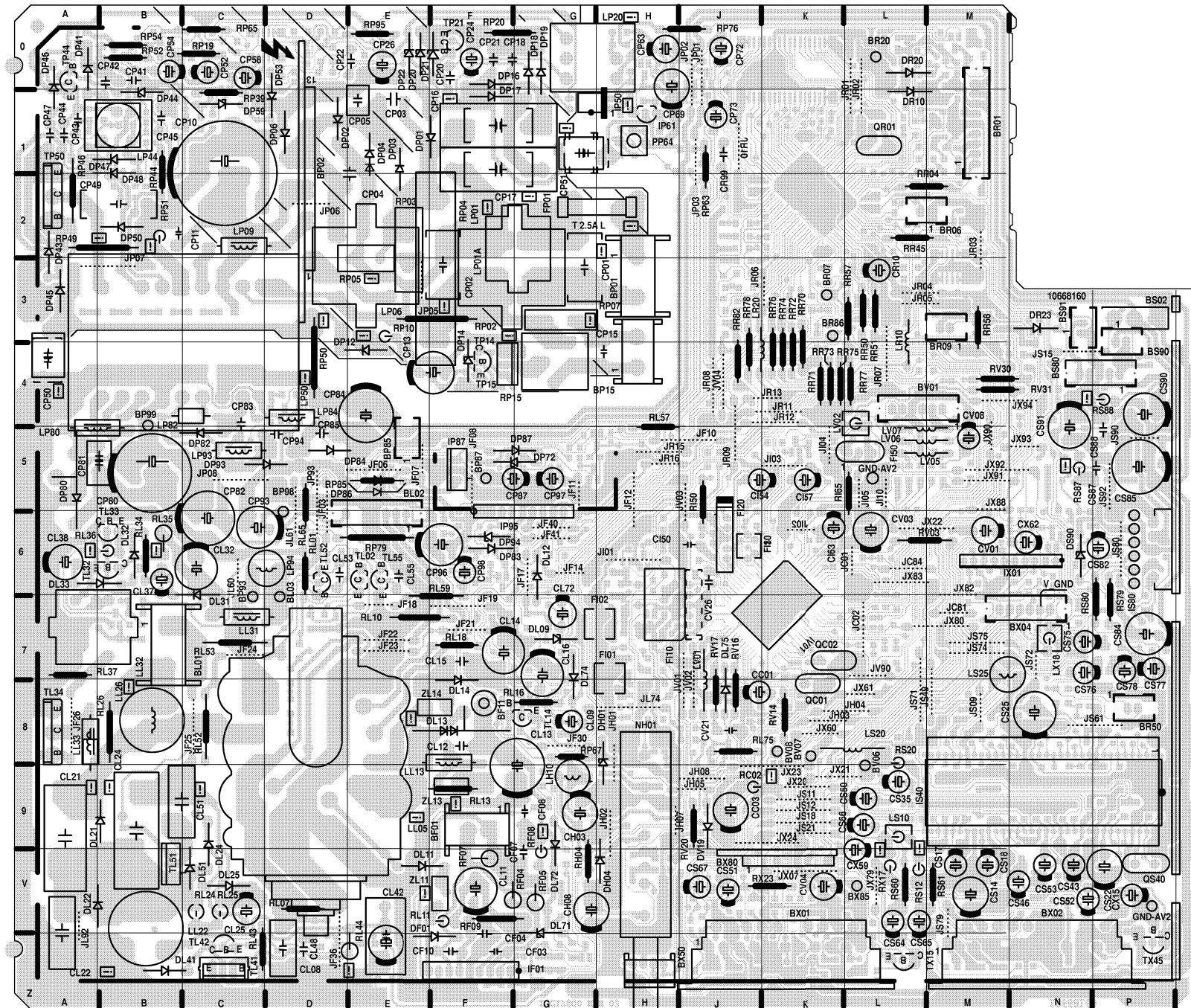






# MAIN BOARD - PLATINE PRINCIPALE - CHASSIS GRUNDPLATTE - PIASTRA PRINCIPALE - PLATINA PRINCIPAL

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES

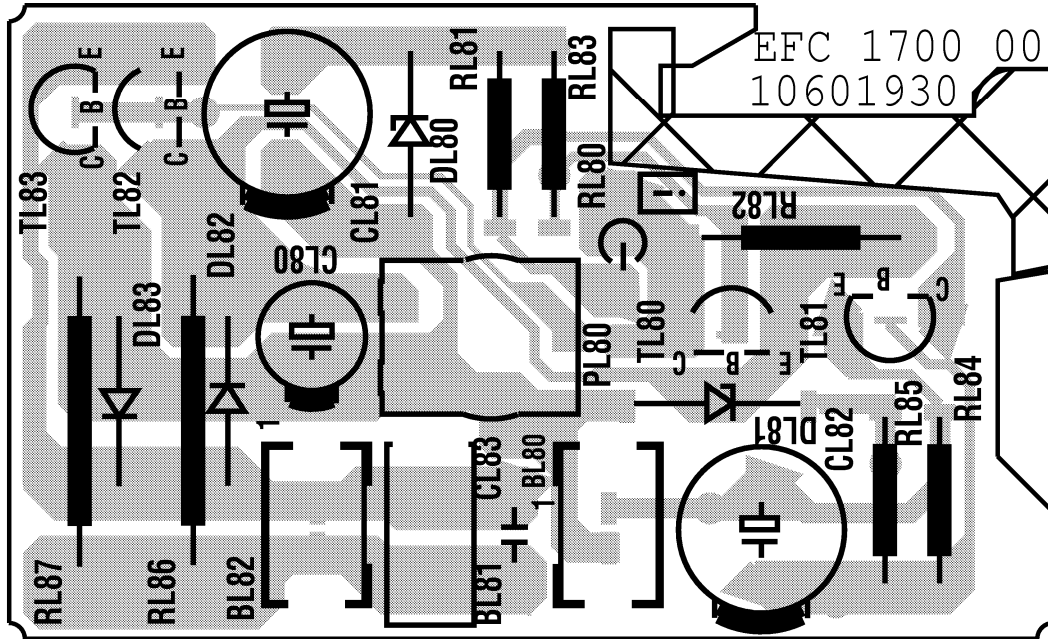




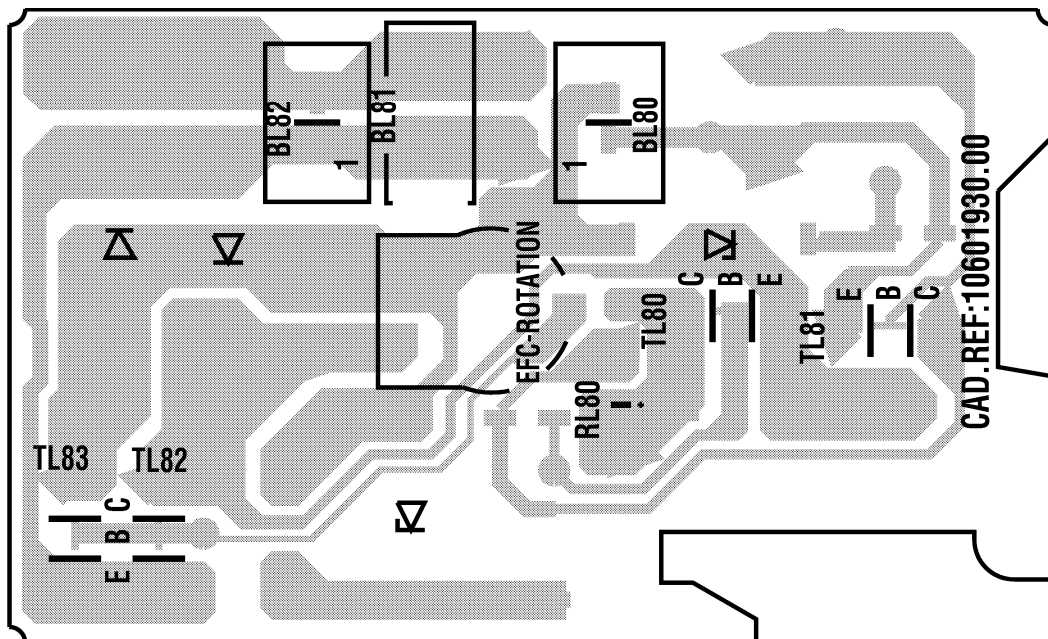


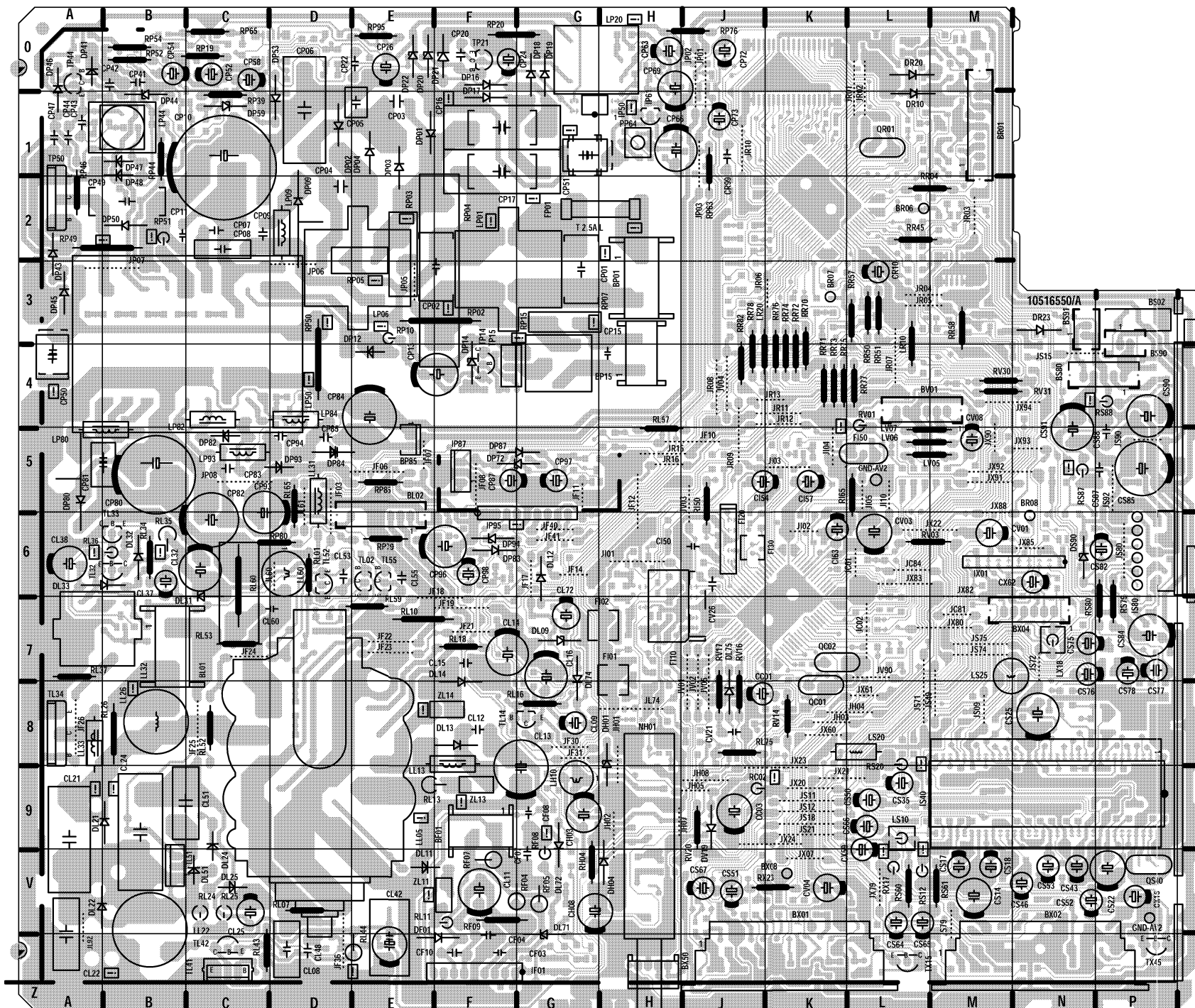
# EFC 17000 EARTH-FIELD CORRECTION BOARD

COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI  
LADO COMPONENTES



SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS









#### PARTS LIST

#### LISTE PIECES DETACHEES

#### ERSATZTEILLISTE

#### LISTA PARTI DI RICAMBIO

#### LISTA DE PIEZAS DE REPUESTO

## THOMSON

### Chassis ICC17

#### MODULES

|             |                              |                   |
|-------------|------------------------------|-------------------|
| <b>MAIN</b> | <b>IC17F5RQ02603C</b>        |                   |
| <b>AVL</b>  | <b>SUBAVL17000</b>           | <b>R 10614890</b> |
| <b>CRT</b>  | <b>CRT17700 (PCB HYB 02)</b> | <b>R 10651940</b> |
| <b>FCB</b>  | <b>FCB1701</b>               | <b>R 25313060</b> |
| <b>KDB</b>  | <b>KDB1706</b>               | <b>R 25388640</b> |



|             |                        |            |
|-------------|------------------------|------------|
| <b>GK01</b> | TSOP1333               | 25358570   |
| <b>IB01</b> | TDA6107Q/N2            | 10659660   |
| <b>IF01</b> | TDA8351                | 20753830   |
| <b>IP20</b> | TS3702CD FLAT          | 10537330   |
| <b>IP50</b> | TLP621 GR(D4-LF2 T)    | △ 20827900 |
| <b>IP61</b> | TL431ACZ               | 10538830   |
| <b>IP87</b> | MC7812/CT              | 46007600   |
| <b>IP95</b> | TDA8139                | 10044580   |
| <b>IR01</b> | ST92R195 CUT 2.2 FLAT  | 10588150   |
| <b>IR02</b> | IC-ROM THOMSON V3.20-0 | 1059455E   |
| <b>IR03</b> | M24C16MN6 FLAT         | 25348520   |
| <b>IS40</b> | MSP3410D-PP-B3/B4      | 10510320   |
| <b>IS80</b> | TDA7269                | 10348790   |
| <b>IV01</b> | TDA8855H FLAT          | 10533960   |
| <b>IX01</b> | BA7604N                | 10539590   |
| <b>ZL11</b> | MP25                   | △ 10500150 |
| <b>ZL13</b> | MP63                   | △ 10472270 |



|                                                             |              |          |
|-------------------------------------------------------------|--------------|----------|
| <b>TB01,TL52,TP21</b>                                       | BF423        | 16003110 |
| <b>TB02,TL02,55</b>                                         | BF422        | 16003090 |
| <b>TF01,TI60,TL31,TP58,59,67,71,76,90,TR60,TS01,81,TV10</b> | BC846B SMD   | 16006260 |
| <b>TI10,30,45</b>                                           | DTC144EK SMD | 16007030 |
| <b>TL14</b>                                                 | 2SC2236Y     | 16000220 |
| <b>TL32</b>                                                 | BC337-40     | 45001466 |
| <b>TL33</b>                                                 | MPS750       | 16001340 |
| <b>TL34,TP50</b>                                            | BUH516TH16   | 10401110 |
| <b>TL41</b>                                                 | BD241C       | 16001880 |

|                           |              |          |
|---------------------------|--------------|----------|
| <b>TL42,TP14, TX15,45</b> | BC546B       | 45001866 |
| <b>TL51</b>               | THYHIPWR     | 10576770 |
| <b>TL59,TP42,86, TR15</b> | BC856B SMD   | 16006310 |
| <b>TL71</b>               | BC847C SMD   | 90618810 |
| <b>TL72</b>               | RN1401 SMD   | 10966100 |
| <b>TP15</b>               | BTB06-600C   | 10259910 |
| <b>TP44</b>               | 2SA1020Y     | 16003740 |
| <b>TP57</b>               | RN2417 SMD   | 25423180 |
| <b>TP72,TR20</b>          | DTC113ZK SMD | 10550750 |
| <b>TP75,82</b>            | BCR191 SMD   | 16006910 |
| <b>TP77</b>               | RN1409 SMD   | 20688820 |
| <b>TR13,23,40</b>         | BCR141 SMD   | 16006890 |
| <b>TX80,81,85,86, 88</b>  | BC847B SMD   | 11070770 |



|                                                                                              |                     |          |
|----------------------------------------------------------------------------------------------|---------------------|----------|
| <b>DB04,DP16,17, 18,19</b>                                                                   | 1N4004              | 44009009 |
| <b>DB05</b>                                                                                  | 1.5KE250A           | 25353360 |
| <b>DB30,31,50,51, 70,71,DJ20, DL31</b>                                                       | BAV21               | 44044407 |
| <b>DE01</b>                                                                                  | BZX55C2V7           | 80444120 |
| <b>DH01</b>                                                                                  | BZX55B33            | 80442730 |
| <b>DH04,DL12,32, 33,72,74,75, DP53,DR20,23, DV19</b>                                         | 1N4148              | 44009209 |
| <b>DI30,40</b>                                                                               | BA782S              | 20542050 |
| <b>DJ20,DL48, DX59</b>                                                                       | BAV103 SMD          | 10155030 |
| <b>DK01,DL09, DP72</b>                                                                       | BZX55B5V1/ZPD5V1 2% | 44035702 |
| <b>DL11,24,25,41, DP12,41,46,47, 48</b>                                                      | RG10G               | 10459090 |
| <b>DL13</b>                                                                                  | FUF5402             | 10458530 |
| <b>DL14</b>                                                                                  | RG15G               | 10272800 |
| <b>DL19,73,77, DP24,39,40,42, 52,54,56,57, 58,60,61,62, 63,67,70,85, 89,DR21,22,24, DV09</b> | LL4148 SMD          | 16012450 |
| <b>DL21</b>                                                                                  | BY228               | 16008370 |

|                      |                         |          |
|----------------------|-------------------------|----------|
| <b>DL22</b>          | BYW76                   | 16009120 |
| <b>DL42</b>          | ZMM5,1 SMD              | 70446740 |
| <b>DL51</b>          | RG10M                   | 10455320 |
| <b>DL71</b>          | BZX55C20                | 30948810 |
| <b>DP01,02,03,04</b> | BYW27-1000              | 10455390 |
| <b>DP06</b>          | BZW04-342               | 25354340 |
| <b>DP14</b>          | BZX55C3V3               | 30948790 |
| <b>DP20</b>          | ZPD51/BZX55C51/BZX79C51 | 90578110 |
| <b>DP21</b>          | BZX85C39                | 80444000 |
| <b>DP22</b>          | BZX55C6V8               | 50890650 |
| <b>DP43,45,50,87</b> | RG102-20                | 10472330 |
| <b>DP44</b>          | BZX55C3V9               | 80444130 |
| <b>DP59</b>          | BZX55C18                | 11073680 |
| <b>DP80</b>          | MUR460                  | 16009650 |
| <b>DP82</b>          | FUF4005/MUR160          | 16009580 |
| <b>DP83</b>          | BAT42                   | 16007410 |
| <b>DP84</b>          | MUR120                  | 10564670 |
| <b>DP93</b>          | MUR420                  | 16009630 |
| <b>DP94</b>          | BZX55C13                | 70438310 |
| <b>DR05</b>          | LL42 SMD                | 16012530 |
| <b>DS90</b>          | BZX55C3V6               | 50890640 |
| <b>DX86</b>          | BAS20 SMD               | 16012250 |
| <b>DX87</b>          | BZX84B8V2 SMD           | 25385640 |
| <b>GE01</b>          | TLUV5300 LED            | 11137650 |



|             |               |          |
|-------------|---------------|----------|
| <b>FI10</b> | OFWK6282K FOS | 10648840 |
| <b>FI20</b> | OFWK9650M FOS | 10545440 |
| <b>FI50</b> | 5M74HZ        | 20338170 |
| <b>QC01</b> | 4M433619HZ    | 10087710 |
| <b>QC02</b> | 3M579545HZ    | 10542190 |
| <b>QR01</b> | 4M0HZ         | 10254300 |
| <b>QS40</b> | 18M432HZ      | 10334670 |



|             |        |          |
|-------------|--------|----------|
| <b>FI01</b> | 40M4HZ | 20300950 |
| <b>FI02</b> | 31M9HZ | 10552630 |
| <b>FI30</b> | 77M8HZ | 10559760 |
| <b>LL22</b> |        | 10636390 |

R : RECYCLED PART  
: PIECE RECYCLEE  
: AUSTAUSCHTEILE  
: RICAMBIO RICICLATO  
: MODULO REPROCESADO

For any requests, please contact THOMSON multimedia after sales service area  
Pour toutes précisions, contactez votre service apres vente local THOMSON multimedia  
Für weitere Auskünfte, wenden Sie sich bitte an die THOMSON multimedia Kundendienst  
Per precisazioni, contattare l'assistenza tecnica THOMSON multimedia  
Para cualquier pregunta, por favor contactar con el responsable de zona del servicio postventa de THOMSON multimedia

01 / 2000 35105110  
REV. N° 0 00 / 00 00000000  
1/3



|      |         |          |
|------|---------|----------|
| PP64 | 1K0 OHM | 70434550 |
|------|---------|----------|



|                                          |                     |            |
|------------------------------------------|---------------------|------------|
| RB01,04                                  | 1K5 OHM 5% 0,50W    | 10121880   |
| RB06                                     | 220R0 OHM 5% 0,25W  | △ 15009810 |
| RB31,51,71                               | 560R0 OHM 10% 0,50W | 10257590   |
| RC02                                     | 1R0 OHM 5% 0,40W    | △ 13060910 |
| RF05                                     | 1R21 OHM 1% 0,70W   | 13010820   |
| RF07                                     | 220R0 OHM 1% 0,70W  | 10233720   |
| RF08                                     | 68R0 OHM 5% 0,70W   | 15009050   |
| RL01                                     | 45K3 OHM 1% 0,25W   | 15018160   |
| RL07                                     | 6K19 OHM 1% 0,40W   | 15020490   |
| RL13                                     | 0R27 OHM 5% 2,50W   | 10263600   |
| RL35,RS87,88                             | 4R7 OHM 5% 0,35W    | △ 10226310 |
| RL36,RP10                                | 2R2 OHM 5% 0,25W    | △ 15009870 |
| RL43                                     | 68K1 OHM 1% 0,70W   | 10147740   |
| RL44                                     | 1R0 OHM 5% 0,50W    | △ 10576360 |
| RP04                                     | 2R7 OHM 5% 4,50W    | 10379110   |
| RP15                                     | 18R0 OHM 220V PTC   | △ 41398800 |
| RP39,52,54,95,<br>RR45,RV03,14,<br>30,31 | 100R0 OHM 5% 0,25W  | 30943330   |
| RP49                                     | 0R47 OHM 5% 2,5W    | △ 25339900 |
| RP50                                     | 10M0 OHM 5% 0,70W   | △ 10074320 |
| RP63                                     | 432K0 OHM 1% 0,13W  | 10354720   |
| RS12                                     | 18R0 OHM 5% 0,30W   | △ 15009660 |
| RV20                                     | 100K0 OHM 1% 0,25W  | 50883810   |
| RX17                                     | 10R0 OHM 5% 0,25W   | △ 15009580 |



|                                     |                 |            |
|-------------------------------------|-----------------|------------|
| CB01                                | 10N0F 3K0V      | 14036450   |
| CL08                                | 10N0F 5% 400V   | 14035870   |
| CL12,15,55,<br>CP18,21,42,85,<br>94 | 330P0F 20% 1K0V | 14035270   |
| CL21                                | 15N0F 3.5% 1K6V | 10643660   |
| CL22                                | 27N0F 5% 400V   | 10263540   |
| CL24                                | 440N0F 5% 250V  | △ 10525280 |
| CL51                                | 290N0F 5% 250V  | 10378450   |
| CP01                                | 100N0F 20% 275V | △ 10331520 |
| CP03,04                             | 4N7F 1K0V       | 10058740   |
| CP05                                | 1N5F 10% 1K0V   | 20338740   |
| CP10                                | 150U0F 385V     | 43424800   |
| CP11                                | 10N0F 10% 400V  | 15001080   |
| CP16,17                             | 470N0F 20% 275V | △ 10596570 |
| CP20                                | 220P0F 10% 400V | 14033000   |
| CP49                                | 3N3F 20% 1K6V   | 10607950   |
| CP50                                | 1N0F 20% 400V   | △ 43106800 |
| CP51                                | 150P0F 20% 400V | △ 20738090 |
| CP81                                | 1N0F 10% 500V   | 10546570   |
| CP83                                | 100P0F 20% 1K0V | 14035280   |



|      |          |            |
|------|----------|------------|
| LL05 | DSTTDS29 | △ 10608670 |
| LL26 |          | △ 10526140 |
| LL32 | DRIVER   | 10518110   |
| LP01 |          | △ 10261530 |
| LP20 | DRIVER   | △ 10554410 |
| LP44 | DRIVER   | 10561800   |
| LP50 | SMT41    | △ 10537860 |

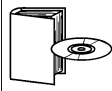
## OTHER PARTS AUTRES PIECES SONSTIGE TEILE ALTRE PARTI OTRAS PIEZAS

|               |                                                                                                                                     |            |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------|------------|
| BB05          | CATHODE RAY TUBE SOCKET<br>SUPPORT TUBE CATHODIQUE<br>BILDROEHRENFASSUNG<br>SUPPORTO TUBO CATODICO<br>SOPORTE T.R.C                 | △ 80298800 |
| BJ10          | CINCH SOCKET<br>PRISE CINCH<br>CINCH-BUCHSE<br>PRESA CINCH<br>TOMA CINCH                                                            | 10037440   |
| BJ11          | SVHS SOCKET<br>PRISE SVHS<br>S-VHS-BUCHSE<br>PRESA SVHS<br>TOMA SVHS                                                                | 20392900   |
| BQ12          | JACK SOCKET<br>PRISE JACK<br>BUCHSE<br>PRESA JACK<br>TOMA JACK                                                                      | 10539510   |
| BX01,02       | SCART SOCKET<br>PRISE PERITEL<br>EURO-AV-BUCHSE<br>EUROPRESA NORMALIZZATA<br>EUROCONNECTOR                                          | 90617260   |
| CH200         | ON/OFF SWITCH<br>CONTACTEUR MARCHE/ARRET<br>EIN-AUS SCHALTER<br>CONTATTORE ACCESO/SPENTO<br>CONTACTOR MARCHA/PARADA                 | △ 10276500 |
| FP01          | 2A5T TIME-LAG FUSE<br>2A5T FUSIBLE TEMPORISE<br>2A5T THERMISCHE SICHERUNG<br>2A5T FUSIBILE TEMPORIZZATO<br>2A5T FUSIBLE TEMPORIZADO | △ 10246750 |
| NH01          | CTT5010 UHF/VHF TUNER<br>CTT5010 TETE UHF/VHF<br>CTT5010 UHF/VHF TUNER<br>CTT5010 TUNER UHF/VHF<br>CTT5010 SINTONIZADOR<br>UHF/VHF  | 20812280   |
| SK01,02,03,04 | MICROSWITCH<br>MICRO CONTACTEUR<br>MIKROSCHALTER<br>MICROINTERRUTTORE<br>MICROCONTACTOR                                             | 30011100   |

## EQUIPMENT/PRESENTATION EQUIPEMENT/PRESENTATION AUSSTATTUNG/GEHAEUSE PARTI VARIE EQUIPO/PRESENTACION

|                                                                                                                                                                  |            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| FRONT PANEL<br>FACADE<br>FRONTPLATTE<br>PANNELLO FRONTALE<br>PANEL FRONTAL                                                                                       | 25346170   |
| REAR PANEL<br>DOS<br>RUFCKWAND<br>PANNELLO POSTERIORE<br>TAPA POSTERIOR                                                                                          | △ 25433840 |
| INFRARED WINDOW<br>GLACE INFRAROUGE<br>INFRAROT FENSTER<br>VETRO INFRAROSSO<br>CRISTAL INFRARROJO                                                                | 25373830   |
| LOGO THOMSON<br>LOGO THOMSON<br>SCHRIFTZUG THOMSON<br>MARCHIO THOMSON<br>LOGOTIPO THOMSON                                                                        | 25367520   |
| CHASSIS SUPPORT<br>SUPPORT CHASSIS<br>CHASSIS HALTER<br>SUPPORTO CHASSIS<br>SOPORTE CHASSIS                                                                      | 25296750   |
| COVER JACK SOCKET<br>CACHE PRISE JACK<br>ABDECKUNG BUCHSE<br>COPERCHIO PRESA JACK<br>CUBIERTA TOMA JACK                                                          | 25298150   |
| 8R OHM 15W LOUDSPEAKER 60X125<br>8R OHM 15W HAUT PARLEUR 60X125<br>8R OHM 15W LAUTSPRECHER 60X125<br>8R OHM 15W ALTOPARLANTE 60X125<br>8R OHM 15W ALTAVOZ 60X125 | 10467060   |
| ON/OFF BUTTON<br>TOUCHE MARCHE/ARRET<br>EIN-AUS TASTE<br>TASTO ACCESO/SPENTO<br>TECLA MARCHA/PARADA                                                              | 25309090   |
| BUTTON ASSY<br>ENSEMBLE DE TOUCHES<br>TASTENEINHEIT<br>ASSIEME TASTI<br>CONJUNTO DE TECLAS                                                                       | 25312630   |
| POWER SUPPLY LEAD<br>CORDON D'ALIMENTATION<br>NETZKABEL<br>CAVO DI ALIMENTAZIONE<br>CABLE DE ALIMENTACION                                                        | △ 10260880 |
| W66EJU023X015 CATHODE RAY TUBE<br>W66EJU023X015 TUBE CATHODIQUE<br>W66EJU023X015 FARBBILDROEHRE<br>W66EJU023X015 TUBO CATODICO<br>W66EJU023X015 T.R.C            | △ 10647170 |
| DEGAUSSING COIL<br>BOBINE DE DEMAGNETISATION<br>ENTMAGNETISIERUNGSSPULE<br>BOBINA DI SMAGNETIZZAZIONE<br>BOBINA DE DESMANTACION                                  | △ 47320181 |
| RCTMB100 REMOTE CONTROL<br>RCTMB100 TELECOMMANDE<br>RCTMB100 FERNBEDIENUNG<br>RCTMB100 TELECOMANDO<br>RCTMB100 TELEMANDO                                         | 20879230   |
| FOLDING BOX<br>EMBALLAGE CARTON<br>KARTON<br>IMBALLAGGIO CARTONE<br>EMBALAJE CARTON                                                                              | 25443870   |

FITTING DOWNER 25348810  
CALE INFERIEURE  
POLSTER UNTEN  
DISTANZIATORE INFERIORE  
CALZO INFERIOR  
FITTING UPPER 25348820  
CALE SUPERIEURE  
POLSTER OBEN  
DISTANZIATORE SUPERIORE  
CALZO SUPERIOR



28WN22E PARTS LIST 35105110  
28WN22E LISTE DE PIECES DETACHEES  
28WN22E ERSATZTEILLISTE  
28WN22E LISTA PARTI DI RICAMBIO  
28WN22E LISTA DE PIEZAS DE REPUESTO  
ICC17 SERVICE MANUAL EUROPE 35063330  
ICC17 DOC TECHNIQUE EUROPE  
ICC17 TECHNISCHE DOKUMENTATION EUROPE  
ICC17 DOCUMENTAZIONE TECNICA EUROPE  
ICC17 DOCUMENTACION TECNICA EUROPE  
28WN22E UM TH D/F/I/E/GB/NL/S/DK/PL/GR 25390150  
28WN22E NU TH D/F/I/E/GB/NL/S/DK/PL/GR  
28WN22E BA TH D/F/I/E/GB/NL/S/DK/PL/GR  
28WN22E IU TH D/F/I/E/GB/NL/S/DK/PL/GR  
28WN22E IU TH D/F/I/E/GB/NL/S/DK/PL/GR  
ICC17 UPDATING N°01 35080950  
ICC17 MISE A JOUR N°01  
ICC17 ERGAENZUNG N°01  
ICC17 AGGIORNAMENTO N°01  
ICC17 ACTUALIZACION N°01  
CDROM ICC17 35065140  
CDROM ICC17  
CDROM ICC17  
CDROM ICC17  
CDROM ICC17

28WN22E

The description and characteristics given here are of informative significance only, and non committal. To keep up the high quality of our products, we reserve the right to make any changes or improvement without previous notice. • Les descriptions et caractéristiques figurant sur ce document sont données à titre d'information et non d'engagement. En effet, soucieux de la qualité de nos produits, nous nous réservons le droit d'effectuer, sans préavis, toute modification ou amélioration. • Die Beschreibungen und Daten in dieser Anleitung dienen nur zur Information und sind nicht bindend. Um die Qualität unserer Produkte ständig zu verbessern, behalten wir uns das Recht auf Änderungen vor. • Le descrizioni e le caratteristiche date su questo documento sono fornite a semplice titolo informativo e senza impegno. Ci riserviamo il diritto di eseguire, senza preavviso, qualsiasi modifica o miglioramento. • Las descripciones y características que figuran en este documento se dan a título de información y no de compromiso. En efecto, en bien de la calidad de nuestros productos, nos reservamos el derecho de efectuar, sin previo aviso, cualquier modificación o mejora.

## LES PROGRAMMES

LA FORMATION PARATECHNIQUE

LES PRODUITS HIGH TECH

FORMATION VENDEURS

MICRO INFORMATIQUE

JOURNÉES FORMATION SERVICE

MAINTENANCE 1<sup>er</sup> DEGRÉ D'INTERVENTION

LES STAGES TECHNIQUES

- Techniques vidéo
- Techniques Télévision

NOS COORDONNÉES

RÉSUMÉS DE COURS

CASSETTES D'AIDE À LA MAINTENANCE

BULLETIN D'INSCRIPTION

ACCÈS À NOS LOCAUX

HOTELS

QUITTER

# THOMSON MULTI MEDIA

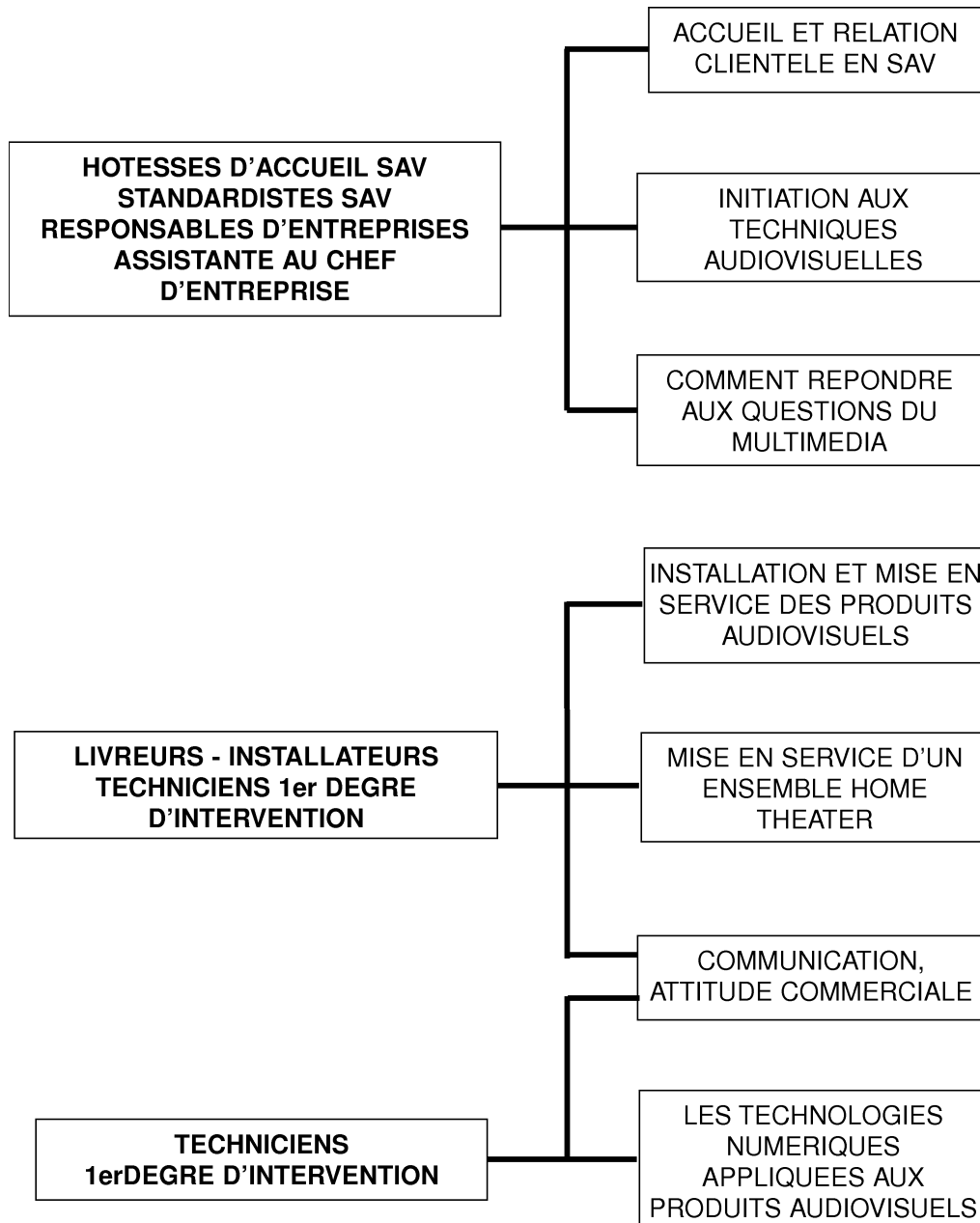


## CENTRE DE FORMATION THOMSON multimedia

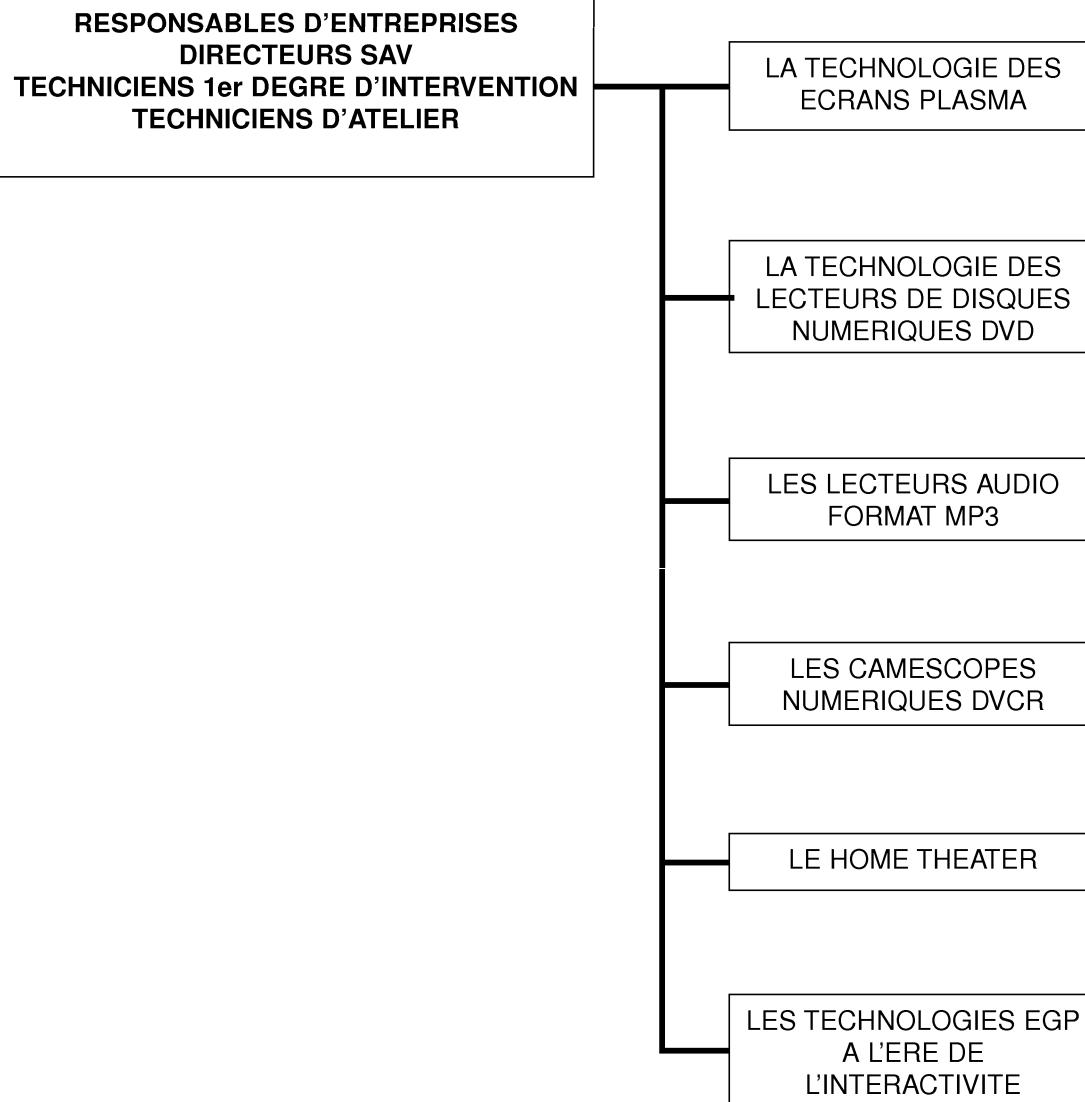
# 2000



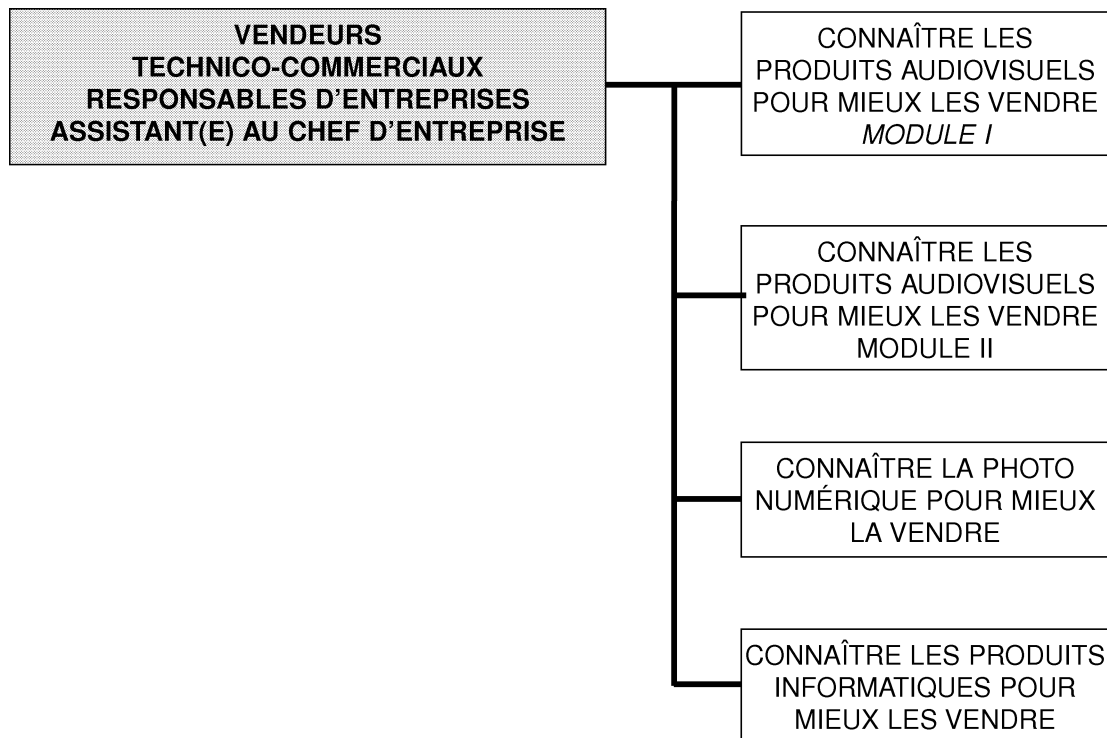
# LA CHAÎNE du SERVICE



# LES PRODUITS HIGH TECH



# LES FORMATIONS VENDEURS



# MICRO INFORMATIQUE

## MAINTENANCE

CONFIGURATION ET  
MAINTENANCE DES PC

INSTALLATION DE  
PÉRIPHÉRIQUES MULTIMEDIA  
ET RÉSEAUX

## SYSTEME D'EXPLOITATION

WINDOWS 98 AVANCÉ -  
LINUX

## INTERNET

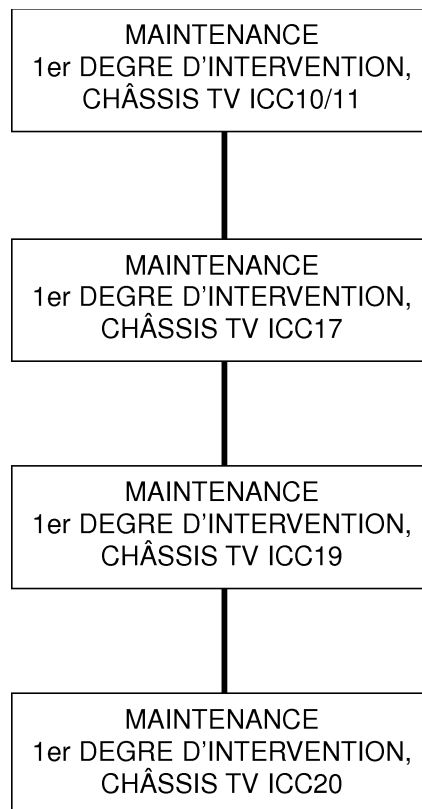
INITIATION A INTERNET -  
CRÉATION DE  
SITE WEB

# LES JOURNÉES FORMATION SERVICE

ASSISTANCE A LA  
MAINTENANCE, CHÂSSIS  
VIDEO R4000 / R5000

ASSISTANCE A LA  
MAINTENANCE, CHÂSSIS TV  
ICC9

ASSISTANCE A LA  
MAINTENANCE, CHÂSSIS TV  
TX91-91G / TX92-92F

**MAINTENANCE*****1er degré* D'INTERVENTION**

# LES TECHNIQUES VIDÉO

## LECTEURS DVD

PRINCIPE ET MAINTENANCE  
DES LECTEURS DVD  
DTH 1000/2000/2500

PRINCIPE ET MAINTENANCE  
DES LECTEURS DVD  
DTH 3300/3600/3700

## MAGNÉTOSCOPES

PRINCIPE ET MAINTENANCE  
DES MAGNÉTOSCOPES VHS

ETUDE APPLIQUÉE DES  
MAGNÉTOSCOPES,  
CHÂSSIS R6000 ET R7000

ETUDE APPLIQUÉE DES  
MAGNÉTOSCOPES,  
CHÂSSIS R8000

ETUDE APPLIQUÉE DES  
MAGNÉTOSCOPES,  
CHÂSSIS R9000

EVOLUTION DES CHÂSSIS  
R7000  
DÉPANNAGE DIRIGÉ DES  
CHÂSSIS R6000/R7000

## CAMESCOPIES

LES BASES  
DES CAMESCOPIES  
FORMAT VHS-C ET VIDÉO 8

LA MAINTENANCE DES  
CAMESCOPIES VHS-C,  
CHÂSSIS M10, M11 ET M12

LA MAINTENANCE DES  
CAMESCOPIES DV, CHÂSSIS  
VMD2, VMD3 ET VMD8

# LES TECHNIQUES TÉLÉVISION

